Baskar, P.
09/868352

(FILE 'HCAPLUS' ENTERED AT 15:19:27 ON 25 FEB 2003)
L1 1354 SEA FILE=HCAPLUS ABB=ON PLU=ON GROUP B(2A)STREPTOCOCC? OR GBS(S)STREPTOCOCC?
L2 234 SEA FILE=HCAPLUS ABB=ON PLU=ON L1(S)(INFECTION OR UTI)
L3 62 SEA FILE=HCAPLUS ABB=ON PLU=ON L2(S)(TREAT? OR THERAP? OR PREVENT? OR CONTROL?)
L4 13 SEA FILE=HCAPLUS ABB=ON PLU=ON L3(S)(PROTEIN OR POLYPROTEIN OR POLYPEPTIDE OR PEPTIDE OR POLYNUCLEOTIDE OR NUCLEOTIDE)

-key terms

L4 ANSWER 1 OF 13 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2003:42407 HCAPLUS
DOCUMENT NUMBER: 138:102030
TITLE: Protein and gene sequences of a Group B Streptococcus antigen gene BVH-A5 and antimicrobial uses
INVENTOR(S): Martin, Denis; Rioux, Stephane; Brodeur, Bernard R.; Hamel, Josee; Boyer, Martine
PATENT ASSIGNEE(S): Shire Biochem Inc., Can.
SOURCE: PCT Int. Appl., 66 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003004650	A2	20030116	WO 2002-CA1019	20020705

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2001-303101P P 20010706
AB The present invention provides protein and gene sequences of a Group B Streptococcus antigen gene BVH-A5. The present invention further relates to antigen BVH-A5 which may be useful to prevent, diagnose and/or treat streptococcal infections.

L4 ANSWER 2 OF 13 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2002:849674 HCAPLUS
DOCUMENT NUMBER: 137:351498
TITLE: Antigens of **group B Streptococcus, polynucleotides** and antibodies for diagnosis and **treatment** of streptococcal **infections**
INVENTOR(S): Martin, Denis; Hamel, Josee; Brodeur, Bernard R.; Rioux, Stephane; Boyer, Martine
PATENT ASSIGNEE(S): Shire Biochem Inc., Can.

SOURCE: PCT Int. Appl., 60 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002088178	A2	20021107	WO 2002-CA664	20020502
WO 2002088178	A3	20030116		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2001-287712P P 20010502

AB The present invention relates to antigens, more particularly antigens of **group B Streptococcus** (**GBS**) (S. agalactiae), **polynucleotides** encoding the antigens, and antibodies specific to the antigens for use in **preventing**, diagnosing and/or **treating streptococcal infections**.

L4 ANSWER 3 OF 13 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2002:716313 HCAPLUS
DOCUMENT NUMBER: 137:243156
TITLE: Group B Streptococcus out surface protein gene phos2-2 and its use in antimicrobial therapy and drug screening
INVENTOR(S): Santangelo, Joseph David; Feldman, Robert; Lane, Jonathan Douglas; Moore, Joanne Christine; Dobson, Richard James; Hughes, Martin John Glenton; Wilson, Rebecca Kerry; Everest, Paul; Dougan, Gordon
PATENT ASSIGNEE(S): Microscience Limited, UK
SOURCE: PCT Int. Appl., 23 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002072623	A1	20020919	WO 2002-GB1089	20020311

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ,

BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: GB 2001-5922 A 20010309

AB A protein from Group B Streptococcus GBS is shown to be an outer surface protein and is a useful target for antimicrobial therapy. Specifically, gene phos2-2 is isolated from GBS strain M732 using a leaderless phoA vector. The out surface expression of phos2-2 gene is detected by its antisera raised in rabbit. The phos2-2 protein offers significant protection against GBS infection (challenged with strain A909) compared to the PBS control and another GBS outer surface protein phos3-9 when it is used to immunize rat. The phos2-2 gene and product are useful in screening for and development of novel antibacterial agents and vaccines.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 4 OF 13 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2002:359275 HCAPLUS
DOCUMENT NUMBER: 137:74443
TITLE: Nucleic acids and proteins from group B Streptococcus agalactiae and group A Streptococcus pyogenes
INVENTOR(S): Telford, John; Masignani, Vega; Margarit Y Ros, Immaculada; Grandi, Guido; Fraser, Claire; Tettelin, Herve
PATENT ASSIGNEE(S): Chiron S.P.A., Italy; The Institute for Genomic Research
SOURCE: PCT Int. Appl., 4525 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002034771	A2	20020502	WO 2001-XB4789	20011029
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
WO 2002034771	A2	20020502	WO 2001-GB4789	20011029
WO 2002034771	A3	20030116		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ,				

NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.:

GB 2000-26333	A	20001027
GB 2000-28727	A	20001124
GB 2001-5640	A	20010307
WO 2001-GB4789	W	20011029

AB The invention provides proteins from group B streptococcus (Streptococcus agalactiae) and group A streptococcus (Streptococcus pyogenes), including amino acid sequences and the corresponding nucleotide sequences. The nucleotide sequence of the full genome of S. agalactiae strain 2603 V/R is provided as are 5483 protein-coding genes and the amino acid sequences of their protein products. Data are given to show that the proteins are useful antigens for vaccines, immunogenic compns., and/or diagnostics. The proteins are also targets for antibiotics to treat or prevent bacterial infection, and in particular, streptococcal infection. [This abstr. record is one of three records for this document necessitated by the large no. of index entries required to fully index the document and publication constraints.].

L4 ANSWER 5 OF 13 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:	2002:359274 HCAPLUS
DOCUMENT NUMBER:	137:74442
TITLE:	Nucleic acids and proteins from group B Streptococcus agalactiae and group A Streptococcus pyogenes
INVENTOR(S):	Telford, John; Masignani, Vega; Margarit Y Ros, Immaculada; Grandi, Guido; Fraser, Claire; Tettelin, Herve
PATENT ASSIGNEE(S):	Chiron S.P.A., Italy; The Institute for Genomic Research
SOURCE:	PCT Int. Appl., 4525 pp. CODEN: PIXXD2
DOCUMENT TYPE:	Patent
LANGUAGE:	English
FAMILY ACC. NUM. COUNT:	3

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002034771	A2	20020502	WO 2001-XA4789	20011029

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

WO 2002034771	A2	20020502	WO 2001-GB4789	20011029

WO 2002034771 A3 20030116
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.:
GB 2000-26333 A 20001027
GB 2000-28727 A 20001124
GB 2001-5640 A 20010307
WO 2001-GB4789 W 20011029

AB The invention provides proteins from group B streptococcus (Streptococcus agalactiae) and group A streptococcus (Streptococcus pyogenes), including amino acid sequences and the corresponding nucleotide sequences. The nucleotide sequence of the full genome of S. agalactiae strain 2603 V/R is provided as are 5483 protein-coding genes and the amino acid sequences of their protein products. Data are given to show that the proteins are useful antigens for vaccines, immunogenic compns., and/or diagnostics. The proteins are also targets for antibiotics to treat or prevent bacterial infection, and in particular, streptococcal infection. [This abstr. record is one of three records for this document necessitated by the large no. of index entries required to fully index the document and publication constraints.].

L4 ANSWER 6 OF 13 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2002:332211 HCAPLUS
DOCUMENT NUMBER: 136:364951
TITLE: Nucleic acids and proteins from group B Streptococcus agalactiae and group A Streptococcus pyogenes
INVENTOR(S): Telford, John; Masignani, Vega; Margarit y Ros, Immaculada; Grandi, Guido; Fraser, Claire; Tettelin, Herve
PATENT ASSIGNEE(S): Chiron S.P.A., Italy; The Institute for Genomic Research
SOURCE: PCT Int. Appl., 4525 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002034771	A2	20020502	WO 2001-GB4789	20011029
WO 2002034771	A3	20030116		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY,

KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

WO 2002034771 A2 20020502 WO 2001-XA4789 20011029
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

WO 2002034771 A2 20020502 WO 2001-XB4789 20011029
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

AU 2002014127 A5 20020506 AU 2002-14127 20011029
PRIORITY APPLN. INFO.: GB 2000-26333 A 20001027
GB 2000-28727 A 20001124
GB 2001-5640 A 20010307
WO 2001-GB4789 W 20011029

AB The invention provides proteins from group B streptococcus (Streptococcus agalactiae) and group A streptococcus (Streptococcus pyogenes), including amino acid sequences and the corresponding nucleotide sequences. The nucleotide sequence of the full genome of S. agalactiae strain 2603 V/R is provided as are 5483 protein-coding genes and the amino acid sequences of their protein products. Data are given to show that the proteins are useful antigens for vaccines, immunogenic compns., and/or diagnostics. The proteins are also targets for antibiotics to treat or prevent bacterial infection, and in particular, streptococcal infection. [This abstr. record is one of three records for this document necessitated by the large no. of index entries required to fully index the document and publication constraints.].

L4 ANSWER 7 OF 13 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2001:731006 HCAPLUS
DOCUMENT NUMBER: 135:299516
TITLE: Protein and DNA sequences of R5, a cell-surface protective antigen of group B Streptococci, and therapeutic uses and compositions thereof
INVENTOR(S): Chhatwal, Gursharan S.; Erdogan, Sezgin; Fagan, Peter K.; Guzman, Carlos A.; Talay, Susanne R.
PATENT ASSIGNEE(S): Gesellschaft fuer Biotechnologische Forschung m.b.H. (GBF), Germany

SOURCE: PCT Int. Appl., 48 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001073037	A2	20011004	WO 2001-EP3618	20010329
WO 2001073037	A3	20020418		

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: EP 2000-106818 A 20000330
EP 2000-122620 A 20001017

AB The invention provides the protein and DNA sequences of a novel cell-surface protective antigen (R-protein), designated R5, and its gene (designated sar5) isolated from Streptococcus agalactiae (Compton R strain). The protein consists of 979 amino acids and contains two identical repeats of 76 amino acids sepd. by a 101 amino acid spacer in the C-terminal region. Protein sequence anal. of R5 showed no similarities with known group B Streptococcus (GBS) proteins. Nucleotide sequence anal., however, showed some similarity to the S. suis mrp gene, which has no known function. The results of challenge expts. demonstrated that the R5 protein is an antigen able to confer protective immunity against both homologous or heterologous strains of GBS. Furthermore, vaccination by either s.c. or mucosal routes triggered the elicitation of protective immunity. Thus, the invention provides compns. comprising R5 protein useful for vaccination against infection with group B streptococci.

L4 ANSWER 8 OF 13 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2000:513523 HCAPLUS
DOCUMENT NUMBER: 133:99542
TITLE: Recombinant surfactant protein A (SP-A) for the treatment or prevention of pulmonary infection and inflammation
INVENTOR(S): Melchers, Klaus; Schafer, Klaus P.; Steinhilber, Wolfram; Whitsett, Jeffrey A.; Levine, Ann Marie; Korfhagen, Thomas R.
PATENT ASSIGNEE(S): BYK Gulden Lomberg Chemische Fabrik G.m.b.H., Germany
SOURCE: PCT Int. Appl., 19 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000043026	A2	20000727	WO 2000-EP324	20000118
WO 2000043026	A3	20011018		

W: AE, AL, AU, BA, BG, BR, CA, CN, CZ, EE, GE, HR, HU, ID, IL, IN, JP, KR, LT, LV, MK, MX, NO, NZ, PL, RO, SG, SI, SK, TR, UA, US, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE

EP 1173194	A2	20020123	EP 2000-912431	20000118

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO

PRIORITY APPLN. INFO.:		
US 1999-155268P	P	19990119
WO 2000-EP324	W	20000118

AB Recombinant SP-A and medicament compns. based thereon are useful for the prevention or treatment of pulmonary infection and inflammation.

L4 ANSWER 9 OF 13 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2000:441940 HCAPLUS

DOCUMENT NUMBER: 133:69844

TITLE: Genes and outer surface proteins of Group B Streptococcus and development of novel antibacterial agents and vaccines

INVENTOR(S): Hughes, Martin John Glenton; Santangelo, Joseph David; Lane, Jonathan Douglas; Everest, Paul; Feldman, Robert; Moore, Joanne Christine; Wilson, Rebecca Kerry; Dobson, Richard James; Dougan, Gordon

PATENT ASSIGNEE(S): Microscience Limited, UK

SOURCE: PCT Int. Appl., 63 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000037646	A2	20000629	WO 1999-GB4377	19991222
WO 2000037646	A3	20001026		

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

EP 1141308	A2	20011010	EP 1999-962422	19991222

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO

BR 9916474	A	20020924	BR 1999-16474	19991222
JP 2002533083	T2	20021008	JP 2000-589700	19991222
NO 2001003102	A	20010810	NO 2001-3102	20010621

PRIORITY APPLN. INFO.:		
GB 1998-28345	A	19981222
GB 1998-28349	A	19981222
GB 1998-28350	A	19981222

GB 1998-28352	A	19981222
GB 1998-28353	A	19981222
GB 1998-28354	A	19981222
GB 1998-28355	A	19981222
GB 1998-28356	A	19981222
GB 1998-28357	A	19981222
GB 1998-28359	A	19981222
GB 1999-82	A	19990104
GB 1999-83	A	19990104
GB 1999-84	A	19990104
GB 1999-85	A	19990104
GB 1999-86	A	19990104
GB 1999-1916	A	19990128
GB 1999-1922	A	19990128
WO 1999-GB4377	W	19991222

AB According to the present invention, a series of genes are identified in Group B Streptococcus (GBS), the products of which may be assocd. with the outer surface of the organism. A no. of clones were selected from GBS (strain M732) genetic library each contg. a gene (or part thereof), which complemented the leaderless alk. phosphatase gene phoA from E. coli. The gene and gene product may of use in diagnosis and identification of the pathogen and in screening and development of novel antibacterial agents and vaccines.

L4 ANSWER 10 OF 13 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2000:441815 HCAPLUS
DOCUMENT NUMBER: 133:84229
TITLE: Outer surface proteins, their genes, and their use
INVENTOR(S): Hughes, Martin John Glenton; Santangelo, Joseph David; Lane, Jonathan Douglas; Feldman, Robert; Moore, Joanne Christine; Everest, Paul; Dobson, Richard James; Henwood, Caroline Joanne; Dougan, Gordon; Wilson, Rebecca Kerry
PATENT ASSIGNEE(S): Microscience Limited, UK
SOURCE: PCT Int. Appl., 32 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000037490	A2	20000629	WO 1999-GB4376	19991222
WO 2000037490	A3	20010920		
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1140994	A1	20011010	EP 1999-962421	19991222
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC,				

PT, IE, SI, LT, LV, FI, RO

BR 9916473	A	20020115	BR 1999-16473		19991222
JP 2002533065	T2	20021008	JP 2000-589559		19991222
NO 2001003101	A	20010813	NO 2001-3101		20010621
PRIORITY APPLN. INFO.:			GB 1998-28346	A	19981222
			GB 1999-1233	A	19990120
			GB 1999-1234	A	19990120
			GB 1999-8321	A	19990412
			GB 1999-12036	A	19990524
			GB 1999-22596	A	19990923
			WO 1999-GB4376	W	19991222

AB According to the present invention, a series of genes are identified in Group B Streptococcus, the products of which may be located on the outer surface of the organism. The genes, or functional fragments thereof, may be useful in the prepn. of therapeutics, e.g. vaccines for the immunization of a patient against microbial infection.

L4 ANSWER 11 OF 13 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2000:98773 HCAPLUS
DOCUMENT NUMBER: 132:163385
TITLE: Antigenic proteins of a group B Streptococcus and the genes encoding them and their therapeutic uses
INVENTOR(S): Le Page, Richard William Falla; Wells, Jeremy Mark; Hanniffy, Sean Bosco
PATENT ASSIGNEE(S): Microbial Technics Limited, UK
SOURCE: PCT Int. Appl., 123 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000006736	A2	20000210	WO 1999-GB2444	19990727
WO 2000006736	A3	20000622		
W: CA, CN, JP, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
CA 2337102	AA	20000210	CA 1999-2337102	19990727
EP 1100920	A2	20010523	EP 1999-934984	19990727
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
PRIORITY APPLN. INFO.:			GB 1998-16335	A 19980727
			US 1999-125163P	P 19990319
			WO 1999-GB2444	W 19990727

AB Novel protein antigens from Streptococcus agalactiae, a group B Streptococcus are described, together with nucleic acid sequences encoding them. Their use in vaccines and screening methods is also described. Genes contg. signal sequences were identified using a nuclease reporter gene. TruI restriction digest fragments were cloned upstream of the nuclease gene and transformants screened using a DNA-Toluidine blue agar overlay which allowed colonies secreting the nuclease to be detected by formation of a pink halo. Mice vaccinated with a no. of the genes showed statistically significant longer survival time than did unvaccinated controls when

challenged with. S. agalactiae.

L4 ANSWER 12 OF 13 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1999:104417 HCAPLUS
DOCUMENT NUMBER: 130:181458
TITLE: Methods for therapeutically treating immunocomprised persons
INVENTOR(S): Blake, Milan
PATENT ASSIGNEE(S): Blake Laboratories, Inc., USA
SOURCE: U.S., 11 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5869047	A	19990209	US 1996-734941	19961022

PRIORITY APPLN. INFO.: US 1996-734941 19961022

AB The subject invention pertains to methods of treating immunocompromised patients, such as individuals infected with HIV, that exhibit elevated levels of IgA relative to IgG. The use of IgA-binding compns. immobilized onto a support matrix to extracorporeally remove IgA mols. from a sample or biol. fluid for therapeutic purposes is provided by the present invention. The subject invention further pertains to novel polypeptides which bind in a specific manner to human IgA. The polypeptides of the present invention comprise an IgA-binding region from an IgA-binding protein of Group B Streptococcal bacteria.

REFERENCE COUNT: 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 13 OF 13 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1995:931845 HCAPLUS
DOCUMENT NUMBER: 124:6484
TITLE: **Prevention** of systemic **infections** caused by **group B streptococcus** and Staphylococcus aureus by multivalent polysaccharide-**protein** conjugate vaccines
AUTHOR(S): Robbins, John B.; Schneerson, Rachel; Vann, Willie F.; Bryla, Dolores A.; Fattom, Ali
CORPORATE SOURCE: National Institute Child Health and Human Development, National Institutes Health, Bethesda, MD, 20892, USA
SOURCE: Annals of the New York Academy of Sciences (1995), 754(Combined Vaccines and Simultaneous Administration), 68-82
CODEN: ANYAA9; ISSN: 0077-8923
PUBLISHER: New York Academy of Sciences
DOCUMENT TYPE: Journal; General Review
LANGUAGE: English

AB A review with 68 refs. discussing polysaccharide-protein conjugate vaccines, group B streptococci (GBS), GBS capsular polysaccharide types, immunol. properties of GBS capsular polysaccharides, capsular

protein conjugates, controlled trials of GBS vaccines, pregnancy and advisability of immunization with GBS vaccines, capsular polysaccharides of Staphylococcus aureus, S. aureus capsular polysaccharide-protein conjugates, and immunization of patients with end-stage renal disease.

(FILE 'MEDLINE, BIOSIS, EMBASE, WPIDS, CONFSCI, SCISEARCH, JICST-EPLUS, JAPIO' ENTERED AT 15:27:39 ON 25 FEB 2003)

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L1          1354 SEA FILE=HCAPLUS ABB=ON  PLU=ON  GROUP B(2A)STREPTOCOCC?
                 OR GBS(S)STREPTOCOCC?
L2           234 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L1(S)(INFECTION OR UTI)

L3            62 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L2(S)(TREAT? OR THERAP?
                 OR PREVENT? OR CONTROL?)
L4            13 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L3(S)(PROTEIN OR
                 POLYPROTEIN OR POLYPEPTIDE OR PEPTIDE OR POLYNUCLEOTIDE
                 OR NUCLEOTIDE)
L5           199 SEA L4
L10            2 SEA L5 AND PHO#


L1          1354 SEA FILE=HCAPLUS ABB=ON  PLU=ON  GROUP B(2A)STREPTOCOCC?
                 OR GBS(S)STREPTOCOCC?
L2           234 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L1(S)(INFECTION OR UTI)

L3            62 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L2(S)(TREAT? OR THERAP?
                 OR PREVENT? OR CONTROL?)
L4            13 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L3(S)(PROTEIN OR
                 POLYPROTEIN OR POLYPEPTIDE OR PEPTIDE OR POLYNUCLEOTIDE
                 OR NUCLEOTIDE)
L5           199 SEA L4
L15           17 SEA L5(S) ADMIN?


L1          1354 SEA FILE=HCAPLUS ABB=ON  PLU=ON  GROUP B(2A)STREPTOCOCC?
                 OR GBS(S)STREPTOCOCC?
L2           234 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L1(S)(INFECTION OR UTI)

L3            62 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L2(S)(TREAT? OR THERAP?
                 OR PREVENT? OR CONTROL?)
L4            13 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L3(S)(PROTEIN OR
                 POLYPROTEIN OR POLYPEPTIDE OR PEPTIDE OR POLYNUCLEOTIDE
                 OR NUCLEOTIDE)
L5           199 SEA L4
L16           23 SEA L5(S) ENCOD?


L17           39 L10 OR L15 OR L16

PROCESSING COMPLETED FOR L17
L18           19 DUP REM L17 (20 DUPLICATES REMOVED)
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L18 ANSWER 1 OF 19 MEDLINE DUPLICATE 1
ACCESSION NUMBER: 2002731260 IN-PROCESS

DOCUMENT NUMBER: 22381805 PubMed ID: 12492868
TITLE: Penicillin-binding proteins in Streptococcus agalactiae: a novel mechanism for evasion of immune clearance.
AUTHOR: Jones Amanda L; Needham Rachel H V; Clancy Anne; Knoll Katherine M; Rubens Craig E
CORPORATE SOURCE: Department of Pediatrics, Division of Infectious Diseases, Children's Hospital and Regional Medical Center and University of Washington, Seattle, WA 98105, USA.
SOURCE: MOLECULAR MICROBIOLOGY, (2003 Jan) 47 (1) 247-56. Journal code: 8712028. ISSN: 0950-382X.
PUB. COUNTRY: England: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: IN-PROCESS; NONINDEXED; Priority Journals
ENTRY DATE: Entered STN: 20021221
Last Updated on STN: 20021221

AB **Group B streptococci** (**GBS**) remain the most significant bacterial pathogen causing neonatal sepsis, pneumonia and meningitis in the USA despite CDC-recommended chemoprophylaxis strategies for **preventing infection**. To cause **infection** pathogens such as **GBS** must evade recognition and clearance by the host's immune system. Strategies for avoidance of opsonization and phagocytic killing include elaboration of antiopsonophagocytic capsules and surface **proteins**. During screening for mutants of **GBS** that were attenuated for virulence in a neonatal rat sepsis model, we identified a mutant with a transposon insertion in the ponA gene. ponA **encodes** an extra-cytoplasmic penicillin-binding **protein** PBP1a, a newly identified virulence trait for **GBS** that promotes resistance to phagocytic killing independent of capsular polysaccharide. Complementation analysis in vivo and in vitro confirmed that the altered phenotypes observed in the mutant were due to the transposon insertion in ponA. Deletion of PBP1a does not affect C3 deposition on **GBS** suggesting that mechanism by which PBP1a protects **GBS** from phagocytic killing is distinct from the antiopsonic activity of capsular polysaccharide. This is the first report describing expression of an antiphagocytic surface **protein** by **GBS** and represents a novel mechanism for evasion of immune recognition and clearance that may explain the decreased virulence observed in Gram-positive bacterial species for penicillin-binding **protein** mutants.

L18 ANSWER 2 OF 19 MEDLINE DUPLICATE 2
ACCESSION NUMBER: 2003005835 IN-PROCESS
DOCUMENT NUMBER: 22399741 PubMed ID: 12511589
TITLE: A novel streptococcal surface protease promotes virulence, resistance to opsonophagocytosis, and cleavage of human fibrinogen.
AUTHOR: Harris Theresa O; Shelver Daniel W; Bohnsack John F; Rubens Craig E
CORPORATE SOURCE: Division of Infectious Disease, Children's Hospital and Regional Medical Center, and University of Washington, Seattle, Washington, USA. Department of Pediatrics and Department of Pathology, University of Utah School of Medicine, Salt Lake City, Utah, USA.

SOURCE: JOURNAL OF CLINICAL INVESTIGATION, (2003 Jan) 111 (1) 61-70.
Journal code: 7802877. ISSN: 0021-9738.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: IN-PROCESS; NONINDEXED; Abridged Index Medicus Journals; Priority Journals
ENTRY DATE: Entered STN: 20030105
Last Updated on STN: 20030105

AB **Group B streptococcus** (**GBS**) is an important human pathogen. In this study, we sought to identify mechanisms that may protect **GBS** from host defenses in addition to its capsular polysaccharide. A gene **encoding** a cell-surface-associated **protein** (cspA) was characterized from a highly virulent type III **GBS** isolate, COH1. Its sequence indicated that it is a subtilisin-like extracellular serine protease homologous to **streptococcal** C5a peptidases and caseinases of lactic acid bacteria. The wild-type strain cleaved the alpha chain of human fibrinogen, whereas a cspA mutant, TOH121, was unable to cleave fibrinogen. We observed aggregated material when COH1 was incubated with fibrinogen but not when the mutant strain was **treated** similarly. This suggested that the product(s) of fibrinogen cleavage have strong adhesive properties and may be similar to fibrin. The cspA gene was present among representative clinical isolates from all nine capsular serotypes, as revealed by Southern blotting. A cspA(-) mutant was ten times less virulent in a neonatal rat sepsis model of **GBS infections**, as measured by LD(50) analysis. In addition, the cspA(-) mutant was significantly more sensitive than the wild-type strain to opsonophagocytic killing by human neutrophils in vitro. Taken together, the results suggest that cleavage of fibrinogen by CspA may increase the lethality of **GBS infection**, potentially by protecting the bacterium from opsonophagocytic killing.

L18 ANSWER 3 OF 19 WPIDS (C) 2003 THOMSON DERWENT
ACCESSION NUMBER: 2002-723316 [78] WPIDS
DOC. NO. CPI: C2002-204805
TITLE: New **pho2-2 peptide** and gene obtained from **Group B Streptococcus**, useful for **treating** or **preventing** bacterial **infection**, such as **Group B streptococcal infection**, focal **infection**, urinary tract **infection**, and chronic mastitis in cows.
DERWENT CLASS: B04 C06 D16
INVENTOR(S): DOBSON, R J; DOUGAN, G; EVEREST, P; FELDMAN, R; HUGHES, M J G; LANE, J D; MOORE, J C; SANTANGELO, J D; WILSON, R K
PATENT ASSIGNEE(S): (MICR-N) MICROSCIENCE LTD
COUNTRY COUNT: 99
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2002072623	A1	20020919	(200278)*	EN	23

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC
MW MZ NL OA PT SD SE SL SZ TR TZ UG ZM ZW
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ
DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP
KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ
NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ
UA UG UZ VN YU ZA ZM ZW

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2002072623 A1		WO 2002-GB1089	20020311

PRIORITY APPLN. INFO: GB 2001-5922 20010309
AN 2002-723316 [78] WPIDS
AB WO 200272623 A UPAB: 20021204
NOVELTY - A new peptide (I) encoded by a gene identified as **pho2**-2 obtained from Group B Streptococcus, and its homologues or functional fragments for therapeutic use, is new.
DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for:
(1) a polynucleotide encoding the peptide for therapeutic use;
(2) a host transformed to express (I);
(3) a vaccine comprising (I) or the means for its expression; and
(4) an antibody raised against the (I).
ACTIVITY - Antibacterial.
No biological data given.
MECHANISM OF ACTION - Gene therapy; Vaccine.
USE - The product of the **pho2**-2 gene is useful for screening potential drugs, for detecting virulence, in the manufacture of a medicament for use in **treating** or **preventing** a condition associated with bacterial **infection**, such as **Group B streptococcal infection**, focal **infection**, urinary tract **infection**, and for veterinary **treatment** (claimed), such as in **treating** chronic mastitis in cows. The bacterial gene and **protein** is useful in gene **therapy**, and in immunization. The **peptide** may also be used in the preparation of antibodies, for passive immunization, diagnostic applications, in the identification of **proteins** having the most favorable antigenic epitopes, as a target for antimicrobial **therapy** to localize a drug to the infecting microbe. The vaccine may be **administered** to females prior to or during pregnancy to protect mother and neonate against **infection** by **Group B Streptococcus**.
Dwg.0/0

L18 ANSWER 4 OF 19 WPIDS (C) 2003 THOMSON DERWENT
ACCESSION NUMBER: 2002-426286 [45] WPIDS
DOC. NO. NON-CPI: N2002-335180
DOC. NO. CPI: C2002-120852
TITLE: New BVH-A2 and BVH-A3 antigens of Group B Streptococcus, useful for treating, preventing or diagnosing streptococcal infections, e.g. sepsis,

meningitis, pneumonia, cellulitis, osteomyelitis, septic arthritis and endocarditis.

DERWENT CLASS: B04 D16 S03

INVENTOR(S): BOYER, M; BRODEUR, B R; HAMEL, J; MARTIN, D; RIOUX, S

PATENT ASSIGNEE(S): (SHIR-N) SHIRE BIOCHEM INC

COUNTRY COUNT: 97

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2002031156	A2	20020418	(200245)*	EN	52

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW

W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PH PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

AU 2002010301 A 20020422 (200254)

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2002031156	A2	WO 2001-CA1465	20011015
AU 2002010301	A	AU 2002-10301	20011015

FILING DETAILS:

PATENT NO	KIND		PATENT NO
AU 2002010301	A	Based on	WO 200231156

PRIORITY APPLN. INFO: US 2000-239919P 20001013

AN 2002-426286 [45] WPIDS

AB WO 200231156 A UPAB: 20020717

NOVELTY - An isolated polynucleotide (I) which encodes a polypeptide at least 70% or 95% identical to a second polypeptide consisting a sequence of 541 (P1), 504 (P2), 529 (P3) or 501 (P4) amino acids, their fragments or analogs, where all sequences are fully defined in the specification, is new.

DETAILED DESCRIPTION - An isolated polynucleotide (I) which:

(a) encodes a polypeptide at least 70% or 95% identical to a second polypeptide consisting a fully defined sequence of 541 (P1), 504 (P2), 529 (P3) or 501 (P4) amino acids as given in the specification, their fragments or analogs;

(b) encodes P1, P2, P3, P4, or a polypeptide that can raise antibodies specific for P1, P2, P3, P4, their fragments or analogs;

(c) encodes an epitope bearing portion of P1, P2, P3, P4, their fragments or analogs; or

(d) is a complement of (a), (b) or (c), is new.

INDEPENDENT CLAIMS are also included for the following:

(1) a vector comprising (I) operably linked to an expression control region;

(2) a host cell transfected with the vector;

(3) producing a polypeptide by culturing a host cell of (2) under conditions allowing the expression of the polypeptide;

(4) an isolated polypeptide comprising a sequence which:
(a) has at least 70% or 95% identity to a second polypeptide selected from P1-P4, their fragments and analogs;
(b) comprises a sequence selected from P1-P4, their fragments and analogs;
(c) is able to raise antibodies having binding specificity for a polypeptide selected from P1-P4, their fragments and analogs;
(d) is an epitope bearing portion of a polypeptide selected from P1-P4, their fragments and analogs; and
(e) comprises (a), (b), (c) or (d) where the N-terminal Met residue or the secretory amino acid sequence is deleted;
(5) a chimeric polypeptide comprising 2 or more polypeptides having a sequence selected from P1-P4, their fragments and analogs, provided that the polypeptides are linked to form a chimeric polypeptide;
(6) prophylactic or therapeutic treatment of Group B Streptococcus (GBS) bacterial infection in an individual susceptible to GBS infection by administering to a composition comprising (I);
(7) diagnosing GBS bacterial infection in an individual susceptible to GBS infection by:
(a) obtaining a biological sample from an individual;
(b) incubating an antibody or its fragment reactive with a GBS polypeptide with the biological sample to form a mixture; and
(c) detecting specifically bound antibody or bound fragment in the mixture which indicates the presence of GBS;
(8) an isolated polynucleotide having a sequence comprising 1626, 1514, 1590 or 1506 bp, their fragments or analogs; and
(9) a kit comprising (I) for the detection or diagnosis of GBS infection.
ACTIVITY - Antibacterial; Antiinflammatory. Experimental protocols are described but no results are given.
MECHANISM OF ACTION - Vaccine.
USE - The **GBS polypeptides, polynucleotides**, and compositions comprising them are useful for **treating, preventing** or diagnosing **streptococcal infections**. These may also be **administered** to individuals at risk of **GBS infections** such as infants for sepsis, meningitis, pneumonia, cellulitis, osteomyelitis, septic arthritis, endocarditis or epiglottis; pregnant women for mild urinary tract **infection** to life-threatening sepsis and meningitis, osteomyelitis, endocarditis, amniotis, endometritis, or wound **infections**; non-pregnant adults for primary bacteremia, skin of soft tissue **infection**, pneumonia, urosepsis, endocarditis, peritonitis, meningitis or empyema; and cattle for mastitis.
Dwg.0/8

L18 ANSWER 5 OF 19 WPIDS (C) 2003 THOMSON DERWENT
ACCESSION NUMBER: 2002-122272 [16] WPIDS
DOC. NO. CPI: C2002-037507
TITLE: New Streptococcus pneumoniae BVH-3 and BVH-11 variant and epitope-bearing polypeptides, useful as vaccine components for treating or preventing streptococcal infections such as otitis media, meningitis, and bacteremia.
DERWENT CLASS: B04 D16
INVENTOR(S): BRODEUR, B; CHARLAND, N; HAMEL, J; MARTIN, D;

OUELLET, C
PATENT ASSIGNEE(S): (SHIR-N) SHIRE BIOCHEM INC
COUNTRY COUNT: 96
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2001098334	A2	20011227	(200216)*	EN	113
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW					
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW					
AU 2001070381	A	20020102	(200230)		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2001098334	A2	WO 2001-CA908	20010619
AU 2001070381	A	AU 2001-70381	20010619

FILING DETAILS:

PATENT NO	KIND		PATENT NO
AU 2001070381	A	Based on	WO 200198334

PRIORITY APPLN. INFO: US 2000-212683P 20000620
AN 2002-122272 [16] WPIDS
AB WO 200198334 A UPAB: 20020308
NOVELTY - An isolated polypeptide (I) comprising a polypeptide with 70 % (preferably 90%) identity to or comprising a second polypeptide having one of 22 sequences (variants of BVH-3; P1), 13 sequences (variants of BVH-11; P2), or 22 sequences (chimeras with BVH-11 and BVH-3; P3), or fragments, analogs or derivatives of them, is new.

DETAILED DESCRIPTION - A new isolated polypeptide (I) is:

(a) a polypeptide having 70 % or 95 % identity to a second polypeptide having an amino acid sequence of one of 22 sequences (variants of BVH-3), 13 sequences (variants of BVH-11), or 22 sequences (chimeras with BVH-11 and BVH-3), where BVH-3 and BVH-11 polypeptides are from Streptococcus pneumoniae SP64 (serogroup 6) or SP63 (serogroup 9), and (P1)-(P3) has a sequence, given in specification;

(b) a polypeptide having an amino acid sequence of (P1), (P2) or (P3), its fragments, analogs, or derivatives;

(c) a polypeptide capable of generating antibodies having binding specificity for second polypeptide having a sequence of (P1), (P2) or (P3);

(d) an epitope bearing portion of a polypeptide having an amino acid sequence of (P1), (P2), or (P3);

(e) is a polypeptide as described above, where the N-terminal Met residue or the secretory amino acid sequence is deleted.

INDEPENDENT CLAIMS are also included for the following:

(1) a chimeric polypeptide (II) comprising two or more polypeptides of (P1), (P2) or (P3) provided that the polypeptides

are linked as to form a chimeric polypeptide;
(2) a vaccine composition (III) comprising (I) or (II), and carrier, diluent or adjuvant;
(3) an isolated polynucleotide (IV):
(a) encoding a polypeptide having 70 % or 95 % identity to (P1), (P2) or (P3);
(b) encoding a polypeptide having an amino acid sequence of (P1), (P2) or (P3), its fragments, analogs, or derivatives;
(c) encoding (P1), (P2) or (P3);
(d) encoding a polypeptide capable of generating antibodies having binding specificity for a polypeptide having a sequence of (P1), (P2) or (P3);
(e) encoding an epitope bearing a portion of a polypeptide (P1), (P2) or (P3); or
(f) which is complementary to (a) - (e);
(4) a vector (V) comprising (IV);
(5) a host cell (VI) transfected with (V);
(6) producing (I) comprising culturing (VI) to express (I).
ACTIVITY - Antiinflammatory; auditory; antibacterial.
MECHANISM OF ACTION - Vaccine. Groups of 7 or 8 female BALB/c mice were immunized with (I) polypeptides and used for protection experiments against intranasal challenge with virulent Streptococcus pneumoniae P4241 strain. The mice were observed for 10 to 14 days post-infection. High survival rates were obtained for (I)-immunized groups with 8 survivors out of 8 animals, respectively.
USE - A vaccine (III) comprising (I) is useful for **therapeutic** or prophylactic **treatment** of meningitis, otitis media, bacteremia or pneumonia **infection** in an individual susceptible to these disorders. (III) is also useful for **therapeutic** or prophylactic **treatment** of any **streptococcal** bacterial **infection** (e.g., caused by **Streptococcus** pneumoniae, group A **Streptococcus** such as **Streptococcus** pyogenes, **group B Streptococcus** such as **Streptococcus** agalactiae or **GBS**, S. dysgalactiae, S. uberis, S. nocardia or Staphylococcus aureus) in an individual (preferably, humans) susceptible to the **infection** (all claimed). A **polynucleotide** (IV) **encoding** (I) is useful in DNA immunization techniques. The **Streptococcus polypeptides** are useful in a diagnostic test for S. pneumoniae **infection**. (IV) is useful for designing DNA probes for use in detecting the presence of **Streptococcus** in a biological sample suspected of containing the bacteria. The DNA probes may also be used for detecting circulating S. pneumonia nucleic acid in a sample for diagnosing **streptococcal infections**.
Dwg.0/34

L18 ANSWER 6 OF 19 MEDLINE DUPLICATE 3
ACCESSION NUMBER: 2002048219 MEDLINE
DOCUMENT NUMBER: 21622367 PubMed ID: 11751519
TITLE: Identification of a novel membrane protein, HP59, with therapeutic potential as a target of tumor angiogenesis.
AUTHOR: Fu C; Bardhan S; Cetateanu N D; Wamil B D; Wang Y; Yan H P; Shi E; Carter C; Venkov C; Yakes F M; Page D L; Lloyd R S; Mernaugh R L; Hellerqvist C G
CORPORATE SOURCE: Department of Biochemistry, Vanderbilt University,

23rd at Pierce, Nashville, TN 37232, USA.
CONTRACT NUMBER: CA 68485 (NCI)
DK 20593 (NIDDK)
SOURCE: CLINICAL CANCER RESEARCH, (2001 Dec) 7 (12) 4182-94.
Journal code: 9502500. ISSN: 1078-0432.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200203
ENTRY DATE: Entered STN: 20020125
Last Updated on STN: 20030102
Entered Medline: 20020327

AB CM101, a polysaccharide isolated from the culture medium of **Group B streptococcus**, a neonatal pathogen, targets pathological angiogenesis and inhibits tumor growth in mice and humans. CM101 also targets neonatal lung and adult sheep lung endothelial cells. A gene **encoding** a transmembrane **protein** that interacts with CM101 was isolated from a sheep lung endothelial cell cDNA library. The gene, termed sp55, **encodes** a 495-amino acid **polypeptide** . COS-7 cells transfected with a vector containing sp55 express the SP55 **protein**-bound CM101 in a concentration-dependent manner. Stably transfected CHO cells also bound CM101. The corresponding human gene, hp59, was isolated from a human fetal lung cDNA library and had a predicted identity to SP55 of 86% over 495 amino acids. HP59 **protein** was shown by immunohistochemistry to be present in the pathological tumor vasculature of the lung, breast, colon, and ovary, but not in the normal vasculature, suggesting that the **protein** may be critical to pathological angiogenesis. The hp59 gene and/or the HP59 **protein** was not expressed in a variety of normal tissues, but was significantly expressed in human fetal lung, consistent with the pathophysiology of **Group B streptococcus infections** in neonates. Mice immunized with HP59 and SP55 **peptides** showed significant attenuation of tumor growth. Immunization effectively inhibited both the tumor angiogenesis and vasculogenesis processes, as evidenced by lack of both HP59- and CD34-positive vessels. These results and the immunohistochemistry data suggest a **therapeutic** potential for the CM101 target **protein** HP59 both as a drug target and as a vaccine against pathoangiogenesis.

L18 ANSWER 7 OF 19 WPIDS (C) 2003 THOMSON DERWENT
ACCESSION NUMBER: 2000-442674 [38] WPIDS
DOC. NO. NON-CPI: N2000-330237
DOC. NO. CPI: C2000-134758
TITLE: New **peptides** useful for **treatment** and **prevention** of conditions associated with Streptococcal **infection** are obtained from **group B Streptococcus**.
DERWENT CLASS: B04 C06 D16 S03
INVENTOR(S): DOBSON, R J; EVEREST, P; FELDMAN, R; HUGHES, M J G; LANE, J D; MOORE, J C; SANTAGELO, J D; WILSON, R K; DOUGAN, G; SANTANGELO, J D
PATENT ASSIGNEE(S): (MICR-N) MICROSCIENCE LTD
COUNTRY COUNT: 91

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 2000037646	A2	20000629	(200038)*	EN	29
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SL SZ TZ UG ZW					
W: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW					
AU 2000018780	A	20000712	(200048)		
NO 2001003102	A	20010810	(200157)		
EP 1141308	A2	20011010	(200167)	EN	
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI					
CZ 2001002172	A3	20011114	(200175)		
KR 2001089844	A	20011011	(200221)		
CN 1331745	A	20020116	(200230)		
HU 2001004825	A2	20020429	(200238)		
ZA 2001004818	A	20020828	(200264)		82
BR 9916474	A	20020924	(200272)		
JP 2002533083	W	20021008	(200281)		76

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2000037646	A2	WO 1999-GB4377	19991222
AU 2000018780	A	AU 2000-18780	19991222
NO 2001003102	A	WO 1999-GB4377	19991222
		NO 2001-3102	20010621
EP 1141308	A2	EP 1999-962422	19991222
		WO 1999-GB4377	19991222
CZ 2001002172	A3	WO 1999-GB4377	19991222
		CZ 2001-2172	19991222
KR 2001089844	A	KR 2001-707911	20010621
CN 1331745	A	CN 1999-814780	19991222
HU 2001004825	A2	WO 1999-GB4377	19991222
		HU 2001-4825	19991222
ZA 2001004818	A	ZA 2001-4818	20010613
BR 9916474	A	BR 1999-16474	19991222
		WO 1999-GB4377	19991222
JP 2002533083	W	WO 1999-GB4377	19991222
		JP 2000-589700	19991222

FILING DETAILS:

PATENT NO	KIND		PATENT NO
AU 2000018780	A	Based on	WO 200037646
EP 1141308	A2	Based on	WO 200037646
CZ 2001002172	A3	Based on	WO 200037646
HU 2001004825	A2	Based on	WO 200037646
BR 9916474	A	Based on	WO 200037646
JP 2002533083	W	Based on	WO 200037646

PRIORITY APPLN. INFO: GB 1999-1922 19990128; GB 1998-28345

Searcher : Shears 308-4994

19981222; GB 1998-28349 19981222; GB 1998-28350 19981222; GB 1998-28352 19981222; GB 1998-28353 19981222; GB 1998-28354 19981222; GB 1998-28355 19981222; GB 1998-28356 19981222; GB 1998-28357 19981222; GB 1998-28359 19981222; GB 1999-82 19990104; GB 1999-83 19990104; GB 1999-84 19990104; GB 1999-85 19990104; GB 1999-86 19990104; GB 1999-1916 19990128

AN 2000-442674 [38] WPIDS

AB WO 200037646 A UPAB: 20021105

NOVELTY - A peptide (I) encoded by an operon including any of 17 genes identified, obtainable from group B Streptococcus, or its homolog or functional fragment, is new.

DETAILED DESCRIPTION - A peptide (I) encoded by an operon including any of 17 genes identified, obtainable from group B Streptococcus, or its homolog or functional fragment, is new. The genes are selected from **pho1**-13, **pho3**-21, **pho2**-15, **pho3**-18, **pho3**-22, **pho3**-3, **pho3**-17, **pho2**-2, **pho1**-5, **pho3**-1, **pho3**-23, **pho3**-50, **pho1**-14, **pho2**-10, **pho3**-14, **pho3**-24 and **pho3**-29.

INDEPENDENT CLAIMS are also included for the following:
(1) a polynucleotide (II) encoding (I) for therapeutic use;
(2) a host (III) transformed to express (I);
(3) a vaccine (IV) comprising (I); and
(4) an antibody (V) raised against (I).

ACTIVITY - Immunostimulant; antibacterial; uropathic.

MECHANISM OF ACTION - Vaccine.

USE - (I) may be used in the manufacture of a medicament for the treatment or prevention of conditions associated with bacterial infection, preferably group B streptococcal, especially focal infection. (I) may be specifically used to treat or prevent urinary tract infection. (I) may also be useful for preparing (V), for screening potential drugs or for the detection of virulence (all claimed). (I) may also be used for veterinary treatment, particularly of chronic mastitis in cows.

Dwg.0/0

L18 ANSWER 8 OF 19 WPIDS (C) 2003 THOMSON DERWENT

ACCESSION NUMBER: 2000-442636 [38] WPIDS

DOC. NO. CPI: C2000-134720

TITLE: **Peptide encoded** by operon including genes identified and obtained from **group B Streptococcus,** for **treating** streptococcal **infections.**

DERWENT CLASS: B04 D16

INVENTOR(S): DOBSON, R J; DOUGAN, G; EVEREST, P; FELDMAN, R; HENWOOD, C J; HUGHES, M J G; LANE, J D; MOORE, J C; SANTANGELO, J D; WILSON, R K

PATENT ASSIGNEE(S): (MICR-N) MICROSCIENCE LTD

COUNTRY COUNT: 91

PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG

WO 2000037490 A2 20000629 (200038)* EN 32
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SL SZ TZ UG ZW
W: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
AU 2000018779 A 20000712 (200048)
NO 2001003101 A 20010813 (200157)
EP 1140994 A1 20011010 (200167) EN
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI
BR 9916473 A 20020115 (200214)
CZ 2001002174 A3 20020213 (200221)
KR 2001099885 A 20011109 (200229)
HU 2002001022 A2 20020828 (200264)
ZA 2001004819 A 20020828 (200264) 62
CN 1357045 A 20020703 (200265)
JP 2002533065 W 20021008 (200281) 40

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2000037490	A2	WO 1999-GB4376	19991222
AU 2000018779	A	AU 2000-18779	19991222
NO 2001003101	A	WO 1999-GB4376	19991222
		NO 2001-3101	20010621
EP 1140994	A1	EP 1999-962421	19991222
		WO 1999-GB4376	19991222
BR 9916473	A	BR 1999-16473	19991222
		WO 1999-GB4376	19991222
CZ 2001002174	A3	WO 1999-GB4376	19991222
		CZ 2001-2174	19991222
KR 2001099885	A	KR 2001-707910	20010621
HU 2002001022	A2	WO 1999-GB4376	19991222
		HU 2002-1022	19991222
ZA 2001004819	A	ZA 2001-4819	20010613
CN 1357045	A	CN 1999-814781	19991222
JP 2002533065	W	WO 1999-GB4376	19991222
		JP 2000-589559	19991222

FILING DETAILS:

PATENT NO	KIND		PATENT NO
AU 2000018779	A	Based on	WO 200037490
EP 1140994	A1	Based on	WO 200037490
BR 9916473	A	Based on	WO 200037490
CZ 2001002174	A3	Based on	WO 200037490
HU 2002001022	A2	Based on	WO 200037490
JP 2002533065	W	Based on	WO 200037490

PRIORITY APPLN. INFO: GB 1999-22596 19990923; GB 1998-28346 19981222; GB 1999-1233 19990120; GB 1999-1234 19990120; GB 1999-8321 19990412; GB 1999-12036 19990524

Searcher : Shears 308-4994

AN 2000-442636 [38] WPIDS
AB WO 200037490 A UPAB: 20021105
NOVELTY - Peptide (I) encoded by an operon including MS4, MS10, MS11, MS14 and/or MS16 identified and obtained from group B Streptococcus or a homologue or functional fragment, is new.
DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:
(1) a polynucleotide encoding (I);
(2) a host transformed to express (I);
(3) a vaccine comprising (I); and
(4) an antibody raised against (I).
ACTIVITY - Antibiotic.
MECHANISM OF ACTION - Vaccine.
USE - (I) is useful for screening potential drugs, or for the detection of virulence, and for the manufacture of a medicament for use in the treatment or prevention of infections such as focal infection and urinary tract infection caused by group B Streptococcus. The polynucleotide is useful therapeutically (claimed). The peptides and vaccines are useful in treatment of chronic mastitis, especially in cows (veterinary purposes).
Dwg.0/0

L18 ANSWER 9 OF 19 MEDLINE DUPLICATE 4
ACCESSION NUMBER: 2001038767 MEDLINE
DOCUMENT NUMBER: 20453461 PubMed ID: 10998175
TITLE: Identification of Streptococcus agalactiae virulence genes in the neonatal rat sepsis model using signature-tagged mutagenesis.
AUTHOR: Jones A L; Knoll K M; Rubens C E
CORPORATE SOURCE: Division of Infectious Diseases, Department of Pediatrics, Children's Hospital and Regional Medical Center and University of Washington, 4800 Sand Point Way NE, CH-32, Seattle, WA 98105, USA.
CONTRACT NUMBER: BWH 811501/N01-AI075326 (NIAID)
SOURCE: MOLECULAR MICROBIOLOGY, (2000 Sep) 37 (6) 1444-55. Journal code: 8712028. ISSN: 0950-382X.
PUB. COUNTRY: ENGLAND: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200011
ENTRY DATE: Entered STN: 20010322
Last Updated on STN: 20010322
Entered Medline: 20001124

AB **Group B streptococcal (GBS) infections** are the most common cause of bacterial sepsis in the immediate newborn period. Apart from the capsule, the factors required for survival of **GBS** in the host are not well defined. In this study, signature-tagged transposon mutagenesis (STM) was used to identify genes required for growth and survival of **GBS** in a neonatal rat sepsis **infection** model. Approximately 1600 transposon mutants were screened in pools of 80 mutants, and approximately 120 mutants defective for survival in the animal host were identified. We successfully cloned and sequenced DNA flanking the transposon insertions from 92 of the mutants. Fifty per cent of the mutants had transposon insertions in genes with homologues in the public databases, whereas the remaining 50% had transposon insertions in genes with unknown function. A significant

proportion of the avirulent mutants had transposon insertions in genes **encoding** transport-associated or regulatory **proteins** or in genes involved in cell surface metabolism, emphasizing the significance of these functions for in vivo survival of **GBS**. Overall, STM analysis revealed **GBS** genomic loci that **encode** a wide variety of functional gene classes, underscoring the diversity of bacterial processes required for the **infection** process. Currently, the function of the genes identified during the screening can only be inferred by homology to previously described genes. However, a number of the genes identified in this study have been shown to correlate with virulence in other pathogens. A virulence of a subset of mutants identified during the screening was confirmed by performing competitive index assays and lethal dose assays. This represents the first report of a genome-wide scan for virulence factors in **GBS**. The identified genes will further our understanding of the pathogenesis of **GBS infections** and may represent targets for intervention or lead to the development of novel **therapies**.

L18 ANSWER 10 OF 19 MEDLINE DUPLICATE 5
ACCESSION NUMBER: 2001112995 MEDLINE
DOCUMENT NUMBER: 20567983 PubMed ID: 11115709
TITLE: Preparation and preclinical evaluation of experimental group B streptococcus type III polysaccharide-cholera toxin B subunit conjugate vaccine for intranasal immunization.
AUTHOR: Shen X; Lagergard T; Yang Y; Lindblad M; Fredriksson M; Holmgren J
CORPORATE SOURCE: Department of Medical Microbiology and Immunology, Goteborg University, Guldhedsgatan 10, S-413 46, Goteborg, Sweden.
SOURCE: VACCINE, (2000 Nov 22) 19 (7-8) 850-61. Journal code: 8406899. ISSN: 0264-410X.
PUB. COUNTRY: ENGLAND: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200102
ENTRY DATE: Entered STN: 20010322
Last Updated on STN: 20010322
Entered Medline: 20010208

AB **Streptococcus group B** (**GBS**) is usually carried asymptomatically in the vaginal tract of women and can be transferred to the newborn during parturition. Serum antibodies to the capsular polysaccharide (CPS) can **prevent** invasive diseases, whereas immunity acting at the mucosal surface may be more important to inhibit the mucosal colonization of **GBS** and thus the risk of **infection** for the newborn. We prepared different **GBS** type III CPS-**protein** conjugate vaccines and evaluated their systemic and mucosal immunogenicity in mice. **GBS** type III CPS was conjugated to tetanus toxoid (TT) or recombinant cholera toxin B subunit (rCTB) either directly or to rCTB indirectly via TT. The conjugation was performed by different methods: (1) CPS was coupled to TT with 1-ethyl-3 (3-dimethylaminopropyl)-carbodiimide (EDAC), using adipic acid dihydrazide (ADH) as a spacer; (2) CPS was conjugated with rCTB using reductive amination; or, (3)

N-succinimidyl 3-(2-pyridyldithio) propionate (SPDP) was used to bind rCTB to the TT of the CPS-TT conjugate. Mice were immunized with these conjugates or purified CPS by subcutaneous (s.c.) and intranasal (i. n.) routes. Antibodies to **GBS** III in serum, lungs and vagina were measured with ELISA. All of the CPS-**protein** conjugates were superior to unconjugated CPS in eliciting CPS-specific immune responses in serum and mucosal tissue extracts. The conjugates, when **administrated** s.c., induced only IgG responses in serum, lung and vagina, while i.n. vaccination also elicited IgA responses in the lungs and vagina. The CPS-TT conjugate **administrated** i.n. induced a strong serum IgG, but only a weak mucosal IgA response, while the CPS-rCTB conjugate elicited high IgG as well as IgA antibodies in the lungs after i.n. immunization. **GBS** III CPS-TT conjugated with rCTB produced a strong systemic and local anti-CPSIII response after i.n. **administration**. Co-**administration** of CT as adjuvant enhanced the anti-CPS systemic and mucosal immune responses further after i.n. **administration** with the CPS conjugates. These findings indicate that: (i) i.n. immunization with **GBS** CPS-**protein** conjugates was more effective than s.c immunization for stimulating serum as well as mucosal immune responses; (ii) rCTB as a carrier **protein** for **GBS** III CPS could markedly improve the mucosal immune response; and (iii) the experimental **GBS** type III CPS conjugates containing rCTB should be investigated as mucosal vaccine to **prevent GBS infection** in humans.

L18 ANSWER 11 OF 19 WPIDS (C) 2003 THOMSON DERWENT
ACCESSION NUMBER: 2000-072185 [06] WPIDS
DOC. NO. CPI: C2000-020554
TITLE: Novel Streptococcal gcp polynucleotides and polypeptides useful for screening for antibacterial compounds.
DERWENT CLASS: B04 D16
INVENTOR(S): BISWAS, S; CHALKER, A F; HOLMES, D J; INGRAHAM, K A; PALMER, L M; RAY, J E; WARREN, R L; ZALACAIN, M; HOLMES, D
PATENT ASSIGNEE(S): (SMIK) SMITHKLINE BEECHAM CORP; (BISW-I) BISWAS S; (CHAL-I) CHALKER A F; (HOLM-I) HOLMES D; (INGR-I) INGRAHAM K A; (PALM-I) PALMER L M; (RAYJ-I) RAY J E; (WARR-I) WARREN R L; (ZALA-I) ZALACAIN M
COUNTRY COUNT: 21
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 9955900	A2	19991104	(200006)*	EN	63
RW: AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE					
W: JP					
EP 1073669	A2	20010207	(200109)	EN	
R: BE CH DE DK FR GB IT LI NL					
US 6274719	B1	20010814	(200148)		
JP 2002512809	W	20020508	(200234)		82
US 2002119510	A1	20020829	(200259)		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE

WO 9955900	A2	WO 1999-US8770	19990422
EP 1073669	A2	EP 1999-919951	19990422
		WO 1999-US8770	19990422
US 6274719	B1	US 1998-66512	19980424
JP 2002512809	W	WO 1999-US8770	19990422
		JP 2000-546043	19990422
US 2002119510	A1 Div ex	US 1998-66512	19980424
		US 2001-923656	20010807

FILING DETAILS:

PATENT NO	KIND	PATENT NO
EP 1073669	A2 Based on	WO 9955900
JP 2002512809	W Based on	WO 9955900

PRIORITY APPLN. INFO: US 1998-66512 19980424; US 2001-923656 20010807

AN 2000-072185 [06] WPIDS

AB WO 9955900 A UPAB: 20000203

NOVELTY - Novel gcp polynucleotides and polypeptides are disclosed. They are isolated from Streptococcus pneumoniae.

DETAILED DESCRIPTION - An isolated gcp polypeptide (I) is new, and comprises the 336 amino acid sequence (A) given in the specification, or has at least 70 (especially 95) % identity to, and over the entire length of (A).

INDEPENDENT CLAIMS are also included for:

(1) an isolated gcp polynucleotide (II) selected from:

(a) an isolated polynucleotide encoding (I);

(b) an isolated polynucleotide that has at least 70 (especially 95) % identity to, and over the entire length of, the polynucleotide of (a);

(c) an isolated polynucleotide that has at least 70 (especially 95) % identity 1011 bp sequence (B) given in the specification;

(d) an isolated polynucleotide encoding (A);

(e) an isolated polynucleotide that comprises (B);

(f) an isolated polynucleotide obtainable by screening an appropriate library under stringent hybridization conditions with a probe comprising (B) or a fragment;

(g) an isolated polynucleotide encoding a mature polypeptide expressed by the gcp gene of S. pneumoniae; and

(h) a polynucleotide sequence complementary to the polynucleotides of (a) to (g);

(2) an antibody antigenic to or immunospecific for (I);

(3) a method for the treatment of an individual in need of enhanced activity or expression of (I);

(4) a method for the treatment of an individual having need to inhibit activity or expression of (I);

(5) a process for diagnosing or prognosis a disease or a susceptibility to a disease in an individual related to expression or activity of (I);

(6) a method for screening to identify compounds that activate or that inhibit the function of (I), comprising a method selected from:

(i) measuring the binding of a candidate compound to (I) or to the cells or membranes bearing (I) or a fusion protein thereof by means of a label directly or indirectly associated with the

candidate compound;

(ii) measuring the binding of a candidate compound to (I) or to the cells or membranes bearing (I) or a fusion protein thereof in the presence of a labeled competitor;

(iii) testing whether the candidate compound results in a signal generated by activation or inhibition of the polypeptide using detection systems appropriate to the cells or cell membranes bearing (I);

(iv) mixing a candidate compound with a solution containing (I), to form a mixture measuring activity of the polypeptide in the mixture, and comparing the activity of the mixture to a standard;

(v) detecting the effect of a candidate compound on the production of mRNA encoding (I), using e.g. an ELISA assay; or

(vi) contacting a composition comprising (I) with the compound to be screened under conditions permitting interaction between the compound and the polypeptide to assess the interaction of a compound, such interaction being associated with a second component capable of providing a detectable signal in response to the interaction of the polypeptide with the compound; and determining whether the compound interacts with and activates or inhibits an activity of (I) by detecting the presence or absence of a signal generated from the interaction of the compound with (I);

(7) an agonist or an antagonist of the activity or expression of (I);

(8) an expression system comprising a polynucleotide capable of producing (I) when said expression system is present in a compatible host cell;

(9) a host cell comprising the expression system of (8) or a membrane thereof expressing (I);

(10) a process for producing (I) comprising the step of culturing a host cell of (9) under conditions sufficient for the production of said polypeptide;

(11) a process for producing a host cell comprising the expression system of (8), comprising transforming or transfecting a cell with an expression system such that the host cell, under appropriate culture conditions, produces (I);

(12) a host cell produced by the process of (11) or a membrane thereof expressing (I);

(13) a computer readable medium having stored thereon a member selected from the group consisting of:

(a) a polynucleotide comprising (B);

(b) a polypeptide comprising (A);

(c) a set of polynucleotide sequences wherein at least one of the sequences is (B);

(d) a set of polypeptide sequences wherein at least one of the sequences comprises (A);

(e) a data set representing a polynucleotide sequence comprising the (B);

(f) a data set representing a polynucleotide sequence encoding a polypeptide sequence comprising (A);

(14) a computer based method for performing homology identification, comprising providing a polynucleotide sequence comprising (B) in a computer readable medium, and comparing the polynucleotide sequence to at least one polynucleotide or polypeptide sequence to identify homology.

ACTIVITY - Glycopeptidase.

MECHANISM OF ACTION - None given.

USE - GCP polypeptides and polynucleotides are useful for

diagnosing diseases due to an infection of an organism with the GCP gene (claimed). They can diagnose the stage and type of infection. GCP polypeptides are also useful for screening for compounds which affect activity of the protein (claimed). These can be used in treatment to inhibit (antagonist i.e. antibacterial drugs) or enhance (agonist) GCP activity, in addition to direct administration of GCP polypeptides to treat conditions associated with a lack of GCP polypeptide (claimed), or direct administration of antisense sequences to prevent expression. GCP polypeptides (administered directly, in a vector i.e. gene therapy, and as a vaccine) and antibodies induce an immune response to immunize and prevent disease. Anti-GCP antibodies induced by the polypeptide are also useful for isolating clones expressing GCP (I), or for purifying the polypeptide by affinity chromatography. Diseases diagnosed, prevented or treated include otitis media, conjunctivitis, pneumonia, bacteremia, sinusitis, pleural empyema, endocarditis and especially meningitis. GCP polypeptides, polynucleotides and their (ant)agonists can to prevent adhesion of bacteria to matrix proteins, and are useful for use on wounds and body implants to prevent bacterial infection

ADVANTAGE - The frequency of Streptococcal infections has risen dramatically, and it is no longer common to isolate Streptococcus pneumoniae strains that are resistant to standard antibiotics. The gcp products of the invention can be used screen for new antibacterial compounds that may target these resistant bacteria. Dwg.0/0

L18 ANSWER 12 OF 19 WPIDS (C) 2003 THOMSON DERWENT
ACCESSION NUMBER: 1999-540309 [45] WPIDS
DOC. NO. CPI: C1999-157780
TITLE: Novel group B Streptococcus antigens - useful as vaccine compositions for prophylaxis or therapy of Streptococcus infections.
DERWENT CLASS: B04 C06 D16
INVENTOR(S): BOYER, M; BRODEUR, B R; CHARLEBOIS, I; HAMEL, J; MARTIN, D; RIOUX, C
PATENT ASSIGNEE(S): (BIOC-N) BIOCHEM VACCINS INC; (BIOC-N) BIOCHEM PHARMA INC; (BIOC-N) BIOCHEM VACCINES INC
COUNTRY COUNT: 86
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 9942588	A2	19990826	(199945)*	EN	154
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG ZW					
W: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZW					
ZA 9901325	A	19991027	(199951)		93
AU 9925059	A	19990906	(200003)		
NO 2000004161	A	20001019	(200062)		
EP 1054971	A2	20001129	(200063)	EN	
R: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE					
CZ 2000003054	A3	20010314	(200117)		
HU 2001002304	A2	20011029	(200175)		
JP 2002507396	W	20020312	(200220)		157

MX 2000008111 A1 20011101 (200279)

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9942588	A2	WO 1999-CA114	19990217
ZA 9901325	A	ZA 1999-1325	19990218
AU 9925059	A	AU 1999-25059	19990217
NO 2000004161	A	WO 1999-CA114	19990217
		NO 2000-4161	20000818
EP 1054971	A2	EP 1999-904646	19990217
		WO 1999-CA114	19990217
CZ 2000003054	A3	WO 1999-CA114	19990217
		CZ 2000-3054	19990217
HU 2001002304	A2	WO 1999-CA114	19990217
		HU 2001-2304	19990217
JP 2002507396	W	WO 1999-CA114	19990217
		JP 2000-532528	19990217
MX 2000008111	A1	MX 2000-8111	20000818

FILING DETAILS:

PATENT NO	KIND		PATENT NO
AU 9925059	A	Based on	WO 9942588
EP 1054971	A2	Based on	WO 9942588
CZ 2000003054	A3	Based on	WO 9942588
HU 2001002304	A2	Based on	WO 9942588
JP 2002507396	W	Based on	WO 9942588

PRIORITY APPLN. INFO: US 1998-75425P 19980220
AN 1999-540309 [45] WPIDS
AB WO 9942588 A UPAB: 19991110
NOVELTY - Group B Streptococcus (GBS) antigens are new.
DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following: (1)An isolated **polynucleotide** (I), which is DNA or RNA and its complement, **encoding** a **GBS polypeptide** (II) having at least 70% or 95% identity to, and capable of generating antibodies to, one of the 35 sequences given in the specification, comprising 39-931 amino acids, or fragments, analogs or its derivatives; (2) A **polynucleotide** which hybridizes under stringent conditions to a second **polynucleotide** having a sequence selected from the 4514, 5126, 5215, 5058, 5607, 4171, 3480 (preferred), 1305 (preferred) or 1230 (preferred) base pair (bp) sequences given in the specification, or fragments, analogues or its derivatives; (3) A vector comprising (I) operably linked to an expression **control** region; (4) A host cell transfected with the vector of (3); (5) A process for producing a **polypeptide**, comprising culturing the host cell of (4) under conditions suitable for expression of the **polypeptide**; and (6) A vaccine composition comprising (II) and a pharmaceutically acceptable carrier, diluent or adjuvant. (7) A method for **therapeutic** or prophylactic **treatment** of bacterial **infection** in an animal susceptible to **streptococcal infection**, comprising **administering** to the animal, which is especially bovine or human, a **therapeutic** or

prophylactic amount of the composition of (6).

USE - The group B Streptococcus (GBS) antigens of the invention are used as vaccine components for the treatment or prophylaxis of diseases and symptoms mediated by Streptococcus infection (claimed), in particular group A Streptococcus (S. pyogenes), group B Streptococcus (GBS or S. agalactiae, S. dysgalactiae, S. uberis, S. nocardia, as well as Staphylococcus aureus. The vaccines are administered to those individuals at risk of GBS infection, particularly pregnant women and infants for sepsis, meningitis, and pneumonia, as well as immunocompromised individuals, such as those with diabetes, liver disease or cancer. Vaccines also have vetinary applications, such as for the treatment of mastitis in cattle.

ACTIVITY Antigenic; immunogenic.

MECHANISM OF ACTION None given.

ADVANTAGE - Type specific group B Streptococcus (GBS) antigens are poorly immunogenic in humans, restricted to one serotype, and elicit a T cell independent response (i.e. no IgG production). This makes them unsuitable as vaccine components for protection against GBS infection. The C-protein beta antigen has also been considered as a GBS vaccine component. However, it is unsuitable as it interacts in a non-immunogenic manner with the Fc region of human IgA. The GBS antigens of the invention over come these difficulties, and provide ideal GBS vaccine components.

Dwg.0/10

L18 ANSWER 13 OF 19 WPIDS (C) 2003 THOMSON DERWENT
ACCESSION NUMBER: 1999-263697 [22] WPIDS
DOC. NO. CPI: C1999-077755
TITLE: Lmb streptococcal adhesion mediator protein.
DERWENT CLASS: B04 D16
INVENTOR(S): LUTTICKEN, R; PODBIELSKI, A; ROZDZINSKI, E; SPELLERBERG, B; LUETTICKEN, R
PATENT ASSIGNEE(S): (MEDI-N) MED IMMUNE INC; (MEDI-N) MEDIMMUNE INC; (LUET-I) LUETTICKEN R; (PODB-I) PODBIELSKI A; (ROZD-I) ROZDZINSKI E; (SPEL-I) SPELLERBERG B
COUNTRY COUNT: 83
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 9916882	A1	19990408	(199922)*	EN	69
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG ZW					
W: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GD GE GH GM HU ID IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU ZW					
AU 9895076	A	19990423	(199935)		
EP 1037997	A1	20000927	(200048)	EN	
R: AT BE CH DE DK ES FI FR GB GR IE IT LI NL PT SE					
US 6406883	B1	20020618	(200244)		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9916882	A1	WO 1998-US20028	19980925
AU 9895076	A	AU 1998-95076	19980925

EP 1037997	A1	EP 1998-948522	19980925
		WO 1998-US20028	19980925
US 6406883	B1 Provisional	US 1997-59952P	19970926
		US 1998-160975	19980925

FILING DETAILS:

PATENT NO	KIND		PATENT NO
AU 9895076	A	Based on	WO 9916882
EP 1037997	A1	Based on	WO 9916882

PRIORITY APPLN. INFO: US 1997-59952P 19970926; US 1998-160975 19980925

AN 1999-263697 [22] WPIDS

AB WO 9916882 A UPAB: 19990609

NOVELTY - An isolated polynucleotide (I) comprising a sequence having at least 95% identity to a sequence encoding residues 1 to 290 of the 306 residue Lmb streptococcal adhesion mediator protein sequence (given in the specification), or its complement.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) a method of making a recombinant vector comprising inserting (I) into a vector, where (I) is DNA;

(2) a recombinant vector comprising (I), where (I) is DNA;

(3) a recombinant host cell comprising (I), where (I) is DNA;

(4) a method for producing a polypeptide comprising expressing from the host cell of (3) the polypeptide encoded by (I);

(5) an isolated polynucleotide comprising a polynucleotide having at least 95% identity to a polynucleotide encoding the same mature protein encoded by the human cDNA in ATCC Deposit No. 209732, or its complement; and

(6) a vaccine comprising an immunogenic polypeptide having an immunogenetic portion from a polypeptide comprising amino acids 1 to 290 of the 306 residue amino acid sequence, or a host cell or vector capable of expressing the immunogenic polypeptide in vivo.

(1) (2) (3) (4) (5) and (6)

ACTIVITY - None given.

MECHANISM OF ACTION - None given.

USE - The **polypeptide encoded** by (I) can be used in a vaccine (claimed). Fragments of (I) may be used as probes for isolation of full length Lmb sequences. The vaccine can be used to **treat Group B Streptococci infections**, which are a leading cause of neonatal sepsis and meningitis.

ADVANTAGE - None given.

Dwg.0/8

L18 ANSWER 14 OF 19 MEDLINE DUPLICATE 6

ACCESSION NUMBER: 1998058801 MEDLINE

DOCUMENT NUMBER: 98058801 PubMed ID: 9371832

TITLE: Inactivation of the alpha C protein antigen gene, bca, by a novel shuttle/suicide vector results in attenuation of virulence and immunity in group B Streptococcus.

AUTHOR: Li J; Kasper D L; Ausubel F M; Rosner B; Michel J L

CORPORATE SOURCE: The Channing Laboratory, Brigham and Women's Hospital, Department of Medicine, Harvard Medical

School, Boston, MA 02115, USA.
CONTRACT NUMBER: R01-AI33963 (NIAID)
R29-AI28500 (NIAID)
R39-AI23339 (NIAID)
+
SOURCE: PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA, (1997 Nov 25) 94 (24) 13251-6.
Journal code: 7505876. ISSN: 0027-8424.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199801
ENTRY DATE: Entered STN: 19980122
Last Updated on STN: 19980122
Entered Medline: 19980108

AB The alpha C **protein** of **group B Streptococcus** (**GBS**) is a major surface-associated antigen. Although its role in the biology and virulence of **GBS** has not been defined, it is opsonic and capable of eliciting protective immunity. The alpha C **protein** is widely distributed among clinical isolates and is a potential **protein** carrier and antigen in conjugate vaccines to **prevent GBS infections**. The structural gene for the alpha C **protein**, bca, has been cloned and sequenced. The **protein encoded** by bca is related to a class of surface-associated **proteins** of gram-positive cocci involved in virulence and immunity. To investigate the potential roles of the alpha C **protein**, bca null mutants were generated in which the bca gene was replaced with a kanamycin resistance cassette via homologous recombination using a novel shuttle/suicide vector. Studies of lethality in neonatal mice showed that the virulence of the bca null mutants was attenuated 5- to 7-fold when compared with the isogenic wild-type strain A909. Significant differences in mortality occurred in the first 24 h, suggesting that the role of the alpha antigen is important in the initial stages of the **infection**. In contrast to A909, bca mutants were no longer killed by polymorphonuclear leukocytes in the presence of alpha-specific antibodies in an in vitro opsonophagocytic assay. In contrast to previous studies, alpha antigen expression does not appear to play a role in resistance to opsonophagocytosis in the absence of alpha-specific antibodies. In addition, antibodies to the alpha C **protein** did not passively protect neonatal mice from lethal challenge with bca mutants, suggesting that these epitopes are uniquely present within the alpha antigen as expressed from the bca gene. Therefore, the alpha C **protein** is important in the pathogenesis of **GBS infection** and is a target for protective immunity in the development of **GBS** vaccines.

L18 ANSWER 15 OF 19 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 97362265 EMBASE
DOCUMENT NUMBER: 1997362265
TITLE: Clindamycin.
AUTHOR: Stevens H.A.
CORPORATE SOURCE: Dr. H.A. Stevens, Department of Obstetrics/Gynecology, University of Florida, PO Box

100294, Gainesville, FL 32610-0294, United States
SOURCE: Primary Care Update for Ob/Gyns, (1997) 4/6 (251-253).
Refs: 5
ISSN: 1068-607X CODEN: PUOGEP
PUBLISHER IDENT.: S 1068-607X(97)00107-8
COUNTRY: United States
DOCUMENT TYPE: Journal; General Review
FILE SEGMENT: 004 Microbiology
010 Obstetrics and Gynecology
037 Drug Literature Index
038 Adverse Reactions Titles
LANGUAGE: English
SUMMARY LANGUAGE: English

AB Clindamycin is a macrolide antibiotic derived from Streptomyces lincolnesis. It exerts its antimicrobial effect by inhibition of bacterial **protein** synthesis. The drug can be **administered** topically, orally, or parenterally. It has excellent activity against most staphylococci, group A and B .beta.-hemolytic streptococci, pneumococci, chlamydia, anaerobic organisms, and Mycoplasma hominis. The antibiotic is not effective against aerobic gram- negative bacilli and enterococci. The most likely side effect associated with use of clindamycin is drug-induced diarrhea. In obstetrics and gynecology, clindamycin may be used as a single agent, in either oral or topical form, for the **treatment** of bacterial vaginosis. It also is effective for the **treatment** of **group B streptococcal infection** in pregnant women who are allergic to .beta.-lactam antibiotics. In combination with an aminoglycoside such as gentamicin, clindamycin also provides effective **treatment** for puerperal endometritis and pelvic inflammatory disease.

L18 ANSWER 16 OF 19 WPIDS (C) 2003 THOMSON DERWENT
ACCESSION NUMBER: 1994-167472 [20] WPIDS
CROSS REFERENCE: 1991-117328 [16]
DOC. NO. CPI: C1994-076806
TITLE: New conjugate vaccine protects against group B Streptococcus infection - comprises gp. B Streptococcus polysaccharide conjugated to C protein alpha antigen deriv., useful against e.g. neonatal sepsis and meningitis.
DERWENT CLASS: B04 D16
INVENTOR(S): AUSUBEL, F M; KASPER, D L; MADOFF, L C; MICHEL, J L
PATENT ASSIGNEE(S): (BGHM) BRIGHAM & WOMENS HOSPITAL; (GEHO) GEN HOSPITAL CORP
COUNTRY COUNT: 29
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 9410317	A2	19940511	(199420)*	EN	103
RW: AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE					
W: AU CA FI HU JP KR NO NZ PL RU					
AU 9456654	A	19940524	(199434)		
WO 9410317	A3	19940707	(199517)		
ZA 9308171	A	19950531	(199527)		102
FI 9501979	A	19950629	(199538)		

NO 9501629	A	19950703 (199538)	
EP 669985	A1	19950906 (199540)	EN
R: AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE			
JP 08505282	W	19960611 (199648)	106
NZ 258684	A	19970424 (199723)	
HU 70981	T	19951128 (199734)	
US 5648241	A	19970715 (199734)	44
AU 689452	B	19980402 (199823)	
AU 9856269	A	19980507 (199830)	
US 5820860	A	19981013 (199848)	
US 5843444	A	19981201 (199904)	
US 5847081	A	19981208 (199905)	
US 5858362	A	19990112 (199910)	
US 5908629	A	19990601 (199929)	
US 5968521	A	19991019 (199950)	
AU 722078	B	20000720 (200040)#	
HU 220198	B	20011128 (200206)	
US 6342223	B1	20020129 (200210)	

APPLICATION DETAILS:

PATENT NO	KIND		APPLICATION	DATE
WO 9410317	A2		WO 1993-US10506	19931102
AU 9456654	A		WO 1993-US10506	19931102
			AU 1994-56654	19931102
ZA 9308171	A		ZA 1993-8171	19931102
FI 9501979	A		WO 1993-US10506	19931102
			FI 1995-1979	19950426
NO 9501629	A		WO 1993-US10506	19931102
			NO 1995-1629	19950428
EP 669985	A1		WO 1993-US10506	19931102
			EP 1994-902202	19931102
JP 08505282	W		WO 1993-US10506	19931102
			JP 1994-511389	19931102
NZ 258684	A		NZ 1993-258684	19931102
			WO 1993-US10506	19931102
HU 70981	T		WO 1993-US10506	19931102
			HU 1995-1260	19931102
US 5648241	A	CIP of	US 1989-408036	19890915
		Cont of	US 1992-968866	19921102
			US 1994-363311	19941222
AU 689452	B		AU 1994-56654	19931102
AU 9856269	A	Div ex	AU 1994-56654	19931102
			AU 1998-56269	19980223
US 5820860	A	CIP of	US 1989-408036	19890915
		Cont of	US 1992-968866	19921102
		Div ex	US 1994-363311	19941222
			US 1995-463288	19950605
US 5843444	A	CIP of	US 1989-408036	19890915
		Cont of	US 1992-968866	19921102
		Div ex	US 1994-363311	19941222
			US 1995-470445	19950606
US 5847081	A	CIP of	US 1989-408036	19890915
		Cont of	US 1992-968866	19921102
		Div ex	US 1994-363311	19941222
			US 1995-462679	19950605
US 5858362	A	CIP of	US 1989-408036	19890915

		Cont of	US 1992-968866	19921102
		Div ex	US 1994-363311	19941222
			US 1995-466210	19950606
US 5908629	A	CIP of	US 1989-408036	19890915
		Cont of	US 1992-968866	19921102
		Div ex	US 1994-363311	19941222
			US 1995-467147	19950606
US 5968521	A	CIP of	US 1989-408036	19890915
		Cont of	US 1992-968866	19921102
		Div ex	US 1994-363311	19941222
			US 1995-469014	19950605
AU 722078	B	Div ex	AU 1994-56654	19931102
			AU 1998-56269	19980223
HU 220198	B		WO 1993-US10506	19931102
			HU 1995-1260	19931102
US 6342223	B1	CIP of	US 1989-408036	19890915
		Cont of	US 1992-968866	19921102
		Div ex	US 1994-363311	19941222
		Cont of	US 1995-469014	19950605
			US 1999-346290	19990720

FILING DETAILS:

PATENT NO	KIND		PATENT NO
AU 9456654	A	Based on	WO 9410317
EP 669985	A1	Based on	WO 9410317
JP 08505282	W	Based on	WO 9410317
NZ 258684	A	Based on	WO 9410317
HU 70981	T	Based on	WO 9410317
AU 689452	B	Previous Publ.	AU 9456654
		Based on	WO 9410317
US 5820860	A	Div ex	US 5648241
US 5843444	A	Div ex	US 5648241
US 5847081	A	Div ex	US 5648241
US 5858362	A	Div ex	US 5648241
US 5908629	A	Div ex	US 5648241
US 5968521	A	Div ex	US 5648241
AU 722078	B	Div ex	AU 689452
		Previous Publ.	AU 9856269
HU 220198	B	Previous Publ.	HU 70981
		Based on	WO 9410317
US 6342223	B1	Div ex	US 5648241
		Cont of	US 5968521

PRIORITY APPLN. INFO: US 1992-968866 19921102; US 1989-408036 19890915; US 1994-363311 19941222; US 1995-463288 19950605; US 1995-470445 19950606; US 1995-462679 19950605; US 1995-466210 19950606; US 1995-467147 19950606; US 1995-469014 19950605; US 1999-346290 19990720

AN 1994-167472 [20] WPIDS

CR 1991-117328 [16]

AB WO 9410317 A UPAB: 20020213

A novel conjugate vaccine capable of conferring host immunity to an infection by group B Streptococcus (GBS) comprises: (a) a gp.-specific or type-specific GBS polysaccharide conjugated to (b) a

functional deriv. of the GBS C protein alpha antigen (Ag), where the deriv. can elicit protective antibodies against the GBS.

USE/ADVANTAGE - The **GBS Streptococcus** agalactiae causes neonatal sepsis and meningitis, postpartum endometritis and **infections** in adults, partic. in diabetics and immunocompromised hosts. The new conjugate vaccine (or antisera which it elicits) can be used to **prevent** or attenuate **GBS infection** (claimed). Antisera produced upon **admin**. of the vaccine to a female can protect both the female and a foetus or neonate via passive incorporation across the placenta (claimed). Prior art vaccines contg. **GBS** type-specific polysaccharides only give a poor antibody response. Conjugating the known polysaccharides to a **protein** adjuvant will improve T-cell dependent protection and by using **GBS**-specific **proteins** as carriers, additional protective epitopes are provided.

Dwg.4/9

ABEQ US 5648241 A UPAB: 19970820

A purified DNA molecule comprising a DNA sequence encoding a group B Streptococcus alpha-antigen or antibody eliciting fragment thereof, wherein said antigen or said fragment comprises the sequence of at least one member selected from the group consisting of Rx, N-Rx, Rx-C and N-Rx-C, wherein X is greater than or equal to 1, where ''N'' is the N-terminal sequence that precedes the start of the 364 amino acid alpha antigen repeating unit sequence (given in the specification), with or without the signal sequence, ''C'' is the 48 amino acid C-terminal anchor sequence of the above sequence, ''R'' is one copy of the 82 amino acids 227-308 of the repeat sequence, and ''Rx'' is ''X'' number of tandem copies of this repeat, tandemly joined at the carboxyl end of one R unit to the amino terminal end of the adjoining R unit.

Dwg.0/9

L18 ANSWER 17 OF 19 MEDLINE DUPLICATE 7

ACCESSION NUMBER: 93084340 MEDLINE
DOCUMENT NUMBER: 93084340 PubMed ID: 1452329
TITLE: Protection of neonatal mice from group B streptococcal infection by maternal immunization with beta C protein.
AUTHOR: Madoff L C; Michel J L; Gong E W; Rodewald A K; Kasper D L
CORPORATE SOURCE: Channing Laboratory, Brigham & Women's Hospital, Boston, Massachusetts.
CONTRACT NUMBER: AI23339 (NIAID)
AI28500 (NIAID)
K11AI00981 (NIAID)
SOURCE: INFECTION AND IMMUNITY, (1992 Dec) 60 (12) 4989-94. Journal code: 0246127. ISSN: 0019-9567.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199301
ENTRY DATE: Entered STN: 19930129
Last Updated on STN: 19930129
Entered Medline: 19930104

AB **Group B streptococci** (**GBS**) cause the majority of cases of neonatal sepsis and meningitis in the

United States. Immunization of women of childbearing age is one strategy under consideration for the **prevention** of neonatal disease. The beta C **protein**, a 130-kDa antigen present in many clinical isolates of **GBS**, was purified from **GBS** by extraction into sodium dodecyl sulfate (SDS)-containing buffer, preparative SDS-polyacrylamide gel electrophoresis, and electroelution. Purified beta C **protein** antigen (25 micrograms) with Freund's adjuvant was used to immunize rabbits. Rabbits developed enzyme-linked immunosorbent assay titers of > 1:1.6 x 10(6), and sera from immunized rabbits were **administered** to pregnant mice. Their neonatal pups were then challenged with a strain of **GBS** expressing beta C **protein**; 68% of these pups were protected by immune antiserum, whereas no **controls** were protected (P < 0.001). The immune serum (diluted 1:100) facilitated opsonophagocytic killing of **GBS** strains expressing the beta C **protein** but not those that do not express the antigen (mean log kill +/- standard deviation = 0.71 +/- 0.8 log10 CFU for beta+ strains and 0.09 +/- 0.2 for beta- strains; P = 0.02). In subsequent experiments, adult female mice were actively immunized with two doses of 2, 5, or 10 micrograms of beta C **protein** 2 months prior to mating. One- to two-day-old offspring of these dams were challenged with **GBS** and were protected in a dose-dependent manner, with 96% survival in the high-dose (10-micrograms) group and 20% survival in a sham-immunized **control** group (P < 0.001). Thus, active immunization of mice with the **GBS** beta C **protein** confers protection against lethal **infection** with beta+ **GBS** to their offspring.

L18 ANSWER 18 OF 19 WPIDS (C) 2003 THOMSON DERWENT
ACCESSION NUMBER: 1990-238980 [31] WPIDS
DOC. NO. CPI: C1990-103325
TITLE: Pulmonary admin. of liposome contg. active cpds. - uses alveolar surfactant protein to enhance transport across lung surface useful for treating variety of lung specific diseases.
DERWENT CLASS: B07
INVENTOR(S): BENSON, B J; WRIGHT, J
PATENT ASSIGNEE(S): (BENS-I) BENSON B J; (WRIG-I) WRIGHT J; (BYKG) BYK GULDEN LOMBERG CHEM FAB
COUNTRY COUNT: 16
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 9007469	A	19900712	(199031)*		37
RW: AT BE CH DE ES FR GB IT LU NL SE					
W: AU JP					
CA 2006956	A	19900629	(199037)		
AU 9050925	A	19900801	(199042)		
US 5006343	A	19910409	(199117)		16
EP 451215	A	19911016	(199142)		37
R: AT BE CH DE FR GB IT LI LU NL SE					
JP 04503953	W	19920716	(199235)		11
AU 638903	B	19930708	(199334)		
EP 451215	B1	19940817	(199432)	EN	21
R: AT BE CH DE FR GB IT LI LU NL SE					
DE 68917603	E	19940922	(199437)		

JP 2954343 B2 19990927 (199945) 13

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
US 5006343	A	US 1988-295926	19881229
EP 451215	A	EP 1990-902969	19891229
JP 04503953	W	WO 1989-US5877	19891229
		JP 1990-503227	19891229
AU 638903	B	AU 1990-50925	19891229
EP 451215	B1	WO 1989-US5877	19891229
		EP 1990-902969	19891229
DE 68917603	E	DE 1989-617603	19891229
		WO 1989-US5877	19891229
		EP 1990-902969	19891229
JP 2954343	B2	WO 1989-US5877	19891229
		JP 1990-503227	19891229

FILING DETAILS:

PATENT NO	KIND		PATENT NO
JP 04503953	W	Based on	WO 9007469
AU 638903	B	Previous Publ.	AU 9050925
		Based on	WO 9007469
EP 451215	B1	Based on	WO 9007469
DE 68917603	E	Based on	EP 451215
		Based on	WO 9007469
JP 2954343	B2	Previous Publ.	JP 04503953
		Based on	WO 9007469

PRIORITY APPLN. INFO: US 1988-295926 19881229

AN 1990-238980 [31] WPIDS

AB WO 9007469 A UPAB: 19940223

Compsn. for pulmonary admin. of a pharmaceutically active substance comprises: (a) liposomes contg. an effective amt. of active substance; and (b) an effective amt. of alveolar surfactant protein to enhance transport of liposomes across a oulmonary surface.

Compsn. comprises 60-90% by wt. liposome-forming cpd., 5-20% by wt. pharmaceutically active substance, and 5-20% by wt. alveolar surfactant protein. The pharmaceutically active substance can be water soluble or water insoluble, e.g., Vitamin E (claimed). The liposome-forming cpd. comprises 1-90% wt. dipalmitoyl phosphatidyl choline, 1-90% wt. phosphatidyl choline, 1-30% wt. phosphatidyl glycerol, and 1-30% wt. cholesterol. The alveolar surfactant protein comprises at least one alveolar surfactant protein SP-A, alveolar surfactant SP-B, and alveolar surfactant protein SP-C. The compsn. is applied to the pulmonary surfaces in the form of an aerosol spray (claimed).

USE/ADVANTAGE - The compsns. are useful for systemic and local delivery of pharmaceutically active substances. A variety of lung-specific diseases such as infant respiratory distress syndrome, adult respiratory distress syndrome, viral pneumonia, bacterial pneumonia, **Group B Streptococcal infection**, oxygen toxicity, alpha-1-anti-protease deficiency, asthma, tuberculosis, lung cancer, bronchitis, etc. could be **treated** using this **admin**. system. The

addn. of alveolar surfactant **protein** renders the delivery system more efficient. @(37pp Dwg.No.0/4)
0/4

ABEQ JP 04503953 W UPAB: 19930928
Compsn. for pulmonary admin. of a pharmaceutically active substance comprises: (a) liposomes contg. an effective amt. of active substance; and (b) an effective amt. of alveolar surfactant protein to enhance transport of liposomes across a pulmonary surface.

Compsn. comprises 60-90 wt.% liposome-forming cpd 5-20 wt.% pharmaceutically active substance, and 5-20 wt.% alveolar surfactant protein. The pharmaceutically active substance can be water soluble or water insoluble e.g. Vitamin E. the liposome-forming cpd. comprises 1-90 wt.% dipalmitoyl phosphatidyl choline, 1-90 wt.% phosphatidyl choline, 1-30 wt.% phosphatidyl glycerol, and 1-30 wt.% cholesterol. The alveolar surfactant protein comprises at least one alveolar surfactant protein SP-A, alveolar surfactant SP-B, and alveolar surfactant protein SP-C. The compsn. is applied to the pulmonary surfaces in the form of an aerosol spray.

USE/ADVANTAGE - The compsns. are useful for systemic and local delivery of pharmaceutically active substances. A variety of lung-specific diseases such as infant respiratory distress syndrome, adult respiratory disJP4503953A - Wtress syndrome, viral pneumonia, bacterial pneumonia. **Group B** **Streptococcal infection**, oxygen toxicity, alpha-1-anti-protease deficiency, asthma, turberculosis, lung cancer, bronchitis, etc. could be **treated** using this **admin**. system,. The addn. of alveolar surfactant **protein** renders the delivery system more efficient

ABEQ US 5006343 A UPAB: 19930928
Pharmaceutical compsn. comprises one or more water-soluble and/or water-insoluble active cpds. (5-20 wt.%) dispersed with at least one liposomic component (60-90 wt.%) and alveolar surfactant protein (5-20 wt.%), e.g. SP-A, SP-B and/or SP-C, which enhances transport across the pulmonary membrane.

USE - The prods. are applied to pulmonary tissues to provide local or systemic therapy.

ABEQ EP 451215 B UPAB: 19940928
A composition for pulmonary administration of a pharmaceutically active substance comprising (a) liposomes formed from at least one liposome-forming compound, said liposomes containing an effective amount of a pharmaceutically active substance; and (b) alveolar surfactant protein in an amount effective to enhance transport of said liposomes across a pulmonary surface.
Dwg.0/4

L18 ANSWER 19 OF 19 MEDLINE DUPLICATE 8
ACCESSION NUMBER: 84201939 MEDLINE
DOCUMENT NUMBER: 84201939 PubMed ID: 6721561
TITLE: Latamoxef and the newborn.
AUTHOR: de Louvois J; James J; Mulhall A
SOURCE: ARCHIVES OF DISEASE IN CHILDHOOD, (1984 Apr) 59 (4) 346-50.
Journal code: 0372434. ISSN: 1468-2044.
PUB. COUNTRY: ENGLAND: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals
ENTRY MONTH: 198406

ENTRY DATE: Entered STN: 19900319
Last Updated on STN: 19970203
Entered Medline: 19840605

AB Thirty one preterm neonates who had clinical, radiological, or bacteriological evidence of **infection** and who would normally have received gentamicin and penicillin were **treated** with latamoxef (Moxalactam) 100 mg/kg/day. All were examined prospectively for clinical improvement and possible side effects. Biochemical and haematological values were monitored and pharmacokinetic variables determined. Thirty babies improved during **treatment**; latamoxef was effective in eradicating the infecting organisms in 7 of 9, including three babies infected with Lancefield **group B streptococci**. High serum concentrations of latamoxef were achieved after either intravenous or intramuscular **administration** and accumulation did not occur. **Treatment** had no effect on renal or hepatic function nor did it result in increased serum values of non-**protein** bound bilirubin. Clotting studies, where performed, were normal and no babies had bloody stools. Two disulfiram-like reactions were recorded. Latamoxef proved a safe and efficacious alternative to gentamicin with penicillin in the initial **treatment** of neonates with clinical evidence of **infection**.

FILE 'USPATFULL' ENTERED AT 15:42:16 ON 25 FEB 2003
L19 77 S L4
L20 9 S L19(S)PHO#
L21 21 S L19(S)ADMIN?
L22 9 S L21(S)ENCOD?
L23 21 S L20 OR L21 OR L22

L23 ANSWER 1 OF 21 USPATFULL

ACCESSION NUMBER:	2003:50849 USPATFULL
TITLE:	Group B Streptococcus vaccine
INVENTOR(S):	Michel, James L., Chestnut Hill, MA, UNITED STATES Madoff, Lawrence C., Brooklin, MA, UNITED STATES Kasper, Dennis L., Newton Centre, MA, UNITED STATES
PATENT ASSIGNEE(S):	The Brigham and Women's Hospital Inc. (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003035805	A1	20030220
APPLICATION INFO.:	US 2002-134687	A1	20020430 (10)

RELATED APPLN. INFO.: Division of Ser. No. US 1998-40181, filed on 18 Mar 1998, GRANTED, Pat. No. US 6426074

	NUMBER	DATE
PRIORITY INFORMATION:	US 1997-39353P	19970319 (60)

DOCUMENT TYPE:	Utility
FILE SEGMENT:	APPLICATION
LEGAL REPRESENTATIVE:	STERNE, KESSLER, GOLDSTEIN & FOX PLLC, 1100 NEW YORK AVENUE, N.W., SUITE 600, WASHINGTON, DC, 20005-3934
NUMBER OF CLAIMS:	17

EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 16 Drawing Page(s)
LINE COUNT: 2305

AB The invention concerns a vaccine capable of protecting a recipient from infection caused group B Streptococcus. The vaccine comprises polysaccharide-protein moieties or protein moieties without a polysaccharide. The vaccine can contain, inter alia, (a) a group B Streptoccus polysaccharide conjugated to (b) either the N-terminal region of the epsilon antigen, a fragment thereof or their functional derivatives such that the vaccine retains the ability to elicit protective antibodies against group B Streptoccus. The vaccine may contain only one type of such polysaccharide-protein unit or may contain a mixture of more than one type of unit. Alternatively, the vaccine may contain antigens from different species of Group B Streptococcus. Additionally, the invention concerns a passive vaccine obtained following immunization with either the capsular polysaccharide-protein conjugate or the non-conjugated protein.

INCL INCLM: 424/184.100
NCL NCLM: 424/184.100

L23 ANSWER 2 OF 21 USPATFULL
ACCESSION NUMBER: 2003:38356 USPATFULL
TITLE: 125 human secreted proteins
INVENTOR(S): Rosen, Craig A., Laytonsville, MD, UNITED STATES
Feng, Ping, Gaithersburg, MD, UNITED STATES
Ruben, Steven M., Olney, MD, UNITED STATES
Ebner, Reinhard, Gaithersburg, MD, UNITED STATES
Olsen, Henrik S., Gaithersburg, MD, UNITED STATES
Ni, Jian, Germantown, MD, UNITED STATES
Wei, Ying-Fei, Berkeley, CA, UNITED STATES
Soppet, Daniel R., Centreville, VA, UNITED STATES
Moore, Paul A., Germantown, MD, UNITED STATES
Kyaw, Hla, Frederick, MD, UNITED STATES
LaFleur, David W., Washington, DC, UNITED STATES
Shi, Yanggu, Gaithersburg, MD, UNITED STATES
Janat, Fouad, Westerly, RI, UNITED STATES
Endress, Gregory A., Florence, MA, UNITED STATES
Carter, Kenneth C., North Potomac, MD, UNITED STATES
Birse, Charles E., North Potomac, MD, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003028003	A1	20030206
APPLICATION INFO.:	US 2001-974879	A1	20011012 (9)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 2001-818683, filed on 28 Mar 2001, PENDING Continuation of Ser. No. US 1999-305736, filed on 5 May 1999, PENDING Continuation-in-part of Ser. No. WO 1998-US23435, filed on 4 Nov 1998, UNKNOWN

	NUMBER	DATE
PRIORITY INFORMATION:	US 2000-239893P	20001013 (60)
	US 1997-64911P	19971107 (60)

	US 1997-64912P	19971107 (60)
	US 1997-64983P	19971107 (60)
	US 1997-64900P	19971107 (60)
	US 1997-64988P	19971107 (60)
	US 1997-64987P	19971107 (60)
	US 1997-64908P	19971107 (60)
	US 1997-64984P	19971107 (60)
	US 1997-64985P	19971107 (60)
	US 1997-66094P	19971117 (60)
	US 1997-66100P	19971117 (60)
	US 1997-66089P	19971117 (60)
	US 1997-66095P	19971117 (60)
	US 1997-66090P	19971117 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850
NUMBER OF CLAIMS: 23
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 3 Drawing Page(s)
LINE COUNT: 36277

AB The present invention relates to novel human secreted proteins and isolated nucleic acids containing the coding regions of the genes encoding such proteins. Also provided are vectors, host cells, antibodies, and recombinant methods for producing human secreted proteins. The invention further relates to diagnostic and therapeutic methods useful for diagnosing and treating diseases, disorders, and/or conditions related to these novel human secreted proteins.

INCL INCLM: 536/023.200
INCLS: 435/069.100; 435/325.000; 435/320.100; 435/183.000
NCL NCLM: 536/023.200
NCLS: 435/069.100; 435/325.000; 435/320.100; 435/183.000

L23 ANSWER 3 OF 21 USPATFULL
ACCESSION NUMBER: 2003:23660 USPATFULL
TITLE: Secreted protein HT5GJ57
INVENTOR(S): Ruben, Steven M., Olney, MD, UNITED STATES
Komatsoulis, George, Silver Spring, MD, UNITED STATES
Duan, Roxanne D., Bethesda, MD, UNITED STATES
Rosen, Craig A., Laytonsville, MD, UNITED STATES
Moore, Paul A., Germantown, MD, UNITED STATES
Shi, Yanggu, Gaithersburg, MD, UNITED STATES
LaFleur, David W., Washington, DC, UNITED STATES
Ebner, Reinhard, Gaithersburg, MD, UNITED STATES
Olsen, Henrik, Gaithersburg, MD, UNITED STATES
Brewer, Laurie A., St. Paul, MN, UNITED STATES
Florence, Kimberly A., Rockville, MD, UNITED STATES
Young, Paul, Gaithersburg, MD, UNITED STATES
Mucenski, Michael, Cincinnati, OH, UNITED STATES
Endress, Gregory A., Florence, MA, UNITED STATES
Soppet, Daniel R., Centreville, VA, UNITED STATES
PATENT ASSIGNEE(S): Human Genome Sciences, Inc., Rockville, MD (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003017500	A1	20030123
APPLICATION INFO.:	US 2001-984276	A1	20011029 (9)

RELATED APPLN. INFO.: Division of Ser. No. US 2000-482273, filed on 13 Jan 2000, PENDING Continuation-in-part of Ser. No. WO 1999-US15849, filed on 14 Jul 1999, UNKNOWN

	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-92921P	19980715 (60)
	US 1998-92922P	19980715 (60)
	US 1998-92956P	19980715 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850
NUMBER OF CLAIMS: 74
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 3 Drawing Page(s)
LINE COUNT: 25053
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel human secreted proteins and isolated nucleic acids containing the coding regions of the genes encoding such proteins. Also provided are vectors, host cells, antibodies, and recombinant methods for producing human secreted proteins. The invention further relates to diagnostic and therapeutic methods useful for diagnosing and treating diseases, disorders, and/or conditions related to these novel human secreted proteins.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
INCL INCLM: 435/007.100
INCLS: 530/388.260; 530/388.150
NCL NCLM: 435/007.100
NCLS: 530/388.260; 530/388.150

L23 ANSWER 4 OF 21 USPATFULL
ACCESSION NUMBER: 2003:17891 USPATFULL
TITLE: Prevention and treatment of streptococcal and staphylococcal infection
INVENTOR(S): Wessels, Michael R., Brookline, MA, UNITED STATES
Cywes, Colette, Brookline, MA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003013643	A1	20030116
APPLICATION INFO.:	US 2001-5200	A1	20011205 (10)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 2001-960921, filed on 25 Sep 2001, GRANTED, Pat. No. US 6467419

	NUMBER	DATE
PRIORITY INFORMATION:	US 2000-234145P	20000921 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: Edward R. Gates, c/o Wolf, Greenfield & Sacks, P.C., Federal Reserve Plaza, 600 Atlantic Avenue, Boston, MA, 02210-2211
NUMBER OF CLAIMS: 162
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 13 Drawing Page(s)
LINE COUNT: 2306
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention provides new methods for use in prevention and treatment of streptococcal and staphylococcal infection.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
INCL INCLM: 514/008.000
INCLS: 514/054.000
NCL NCLM: 514/008.000
NCLS: 514/054.000

L23 ANSWER 5 OF 21 USPATFULL
ACCESSION NUMBER: 2002:291062 USPATFULL
TITLE: Secreted protein HNFGF20
INVENTOR(S): Komatsoulis, George, Silver Spring, MD, United States
Rosen, Craig A., Laytonsville, MD, United States
Ruben, Steven M., Olney, MD, United States
Duan, Roxanne D., Bethesda, MD, United States
Moore, Paul A., Germantown, MD, United States
Shi, Yanggu, Gaithersburg, MD, United States
LaFleur, David W., Washington, DC, United States
Wei, Ying-Fei, Berkeley, CA, United States
Ni, Jian, Rockville, MD, United States
Florence, Kimberly A., Rockville, MD, United States
Young, Paul, Gaithersburg, MD, United States
Brewer, Laurie A., St. Paul, MN, United States
Soppet, Daniel R., Centreville, VA, United States
Endress, Gregory A., Potomac, MD, United States
Ebner, Reinhard, Gaithersburg, MD, United States
Olsen, Henrik, Gaithersburg, MD, United States
Mucenski, Michael, Cincinnati, OH, United States
PATENT ASSIGNEE(S): Human Genome Sciences, Inc., Rockville, MD, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6476195	B1	20021105
APPLICATION INFO.:	US 2000-489847		20000124 (9)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. WO 1999-US17130, filed on 29 Jul 1999

	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-94657P	19980730 (60)
	US 1998-95486P	19980805 (60)
	US 1998-96319P	19980812 (60)
	US 1998-95454P	19980806 (60)
	US 1998-95455P	19980806 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED

PRIMARY EXAMINER: Jones, W. Gary
ASSISTANT EXAMINER: Goldberg, Jeanine
LEGAL REPRESENTATIVE: Human Genome Sciences, Inc.
NUMBER OF CLAIMS: 36
EXEMPLARY CLAIM: 1,7
NUMBER OF DRAWINGS: 3 Drawing Figure(s); 3 Drawing Page(s)
LINE COUNT: 20107
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to novel human secreted protein (HNFGF20). Polypeptides of the invention are duseful in dianosis and treatment of disorders affecting the immune system.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
INCL INCLM: 530/350.000
INCLS: 530/350.000; 435/006.000; 435/007.100; 536/023.100
NCL NCLM: 530/350.000
NCLS: 435/006.000; 435/007.100; 536/023.100

L23 ANSWER 6 OF 21 USPATFULL
ACCESSION NUMBER: 2002:290742 USPATFULL
TITLE: 94 Human Secreted Proteins
INVENTOR(S): Ruben, Steven M., Olney, MD, United States
Ni, Jian, Rockville, MD, United States
Rosen, Craig A., Laytonsville, MD, United States
Wei, Ying-Fei, Berkeley, CA, United States
Young, Paul, Gaithersburg, MD, United States
Florence, Kimberly, Rockville, MD, United States
Soppet, Daniel R., Centreville, VA, United States
Brewer, Laurie A., St. Paul, MN, United States
Endress, Gregory A., Potomac, MD, United States
Carter, Kenneth C., Potomac, MD, United States
Mucenski, Michael, Cincinnati, OH, United States
Ebner, Reinhard, Gaithersburg, MD, United States
Lafleur, David W., Washington, DC, United States
Olsen, Henrik, Gaithersburg, MD, United States
Shi, Yanggu, Gaithersburg, MD, United States
Moore, Paul A., Germantown, MD, United States
Komatsoulis, George, Silver Spring, MD, United States
PATENT ASSIGNEE(S): Human Genome Sciences, Inc., Rockville, MD, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6475753	B1	20021105
APPLICATION INFO.:	US 1999-461325		19991214 (9)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. WO 1999-US13418, filed on 15 Jun 1999

	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-89507P	19980616 (60)
	US 1998-89508P	19980616 (60)
	US 1998-89509P	19980616 (60)
	US 1998-89510P	19980616 (60)
	US 1998-90112P	19980622 (60)
	US 1998-90113P	19980622 (60)

DOCUMENT TYPE: Utility

FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Eyler, Yvonne
ASSISTANT EXAMINER: Hamud, Fozia
LEGAL REPRESENTATIVE: Human Genome Sciences, Inc.
NUMBER OF CLAIMS: 37
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 0 Drawing Figure(s); 0 Drawing Page(s)
LINE COUNT: 18031
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to novel human secreted proteins and isolated nucleic acids containing the coding regions of the genes encoding such proteins. Also provided are vectors, host cells, antibodies, and recombinant methods for producing human secreted proteins. The invention further relates to diagnostic and therapeutic methods useful for diagnosing and treating disorders related to these novel human secreted proteins.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
INCL INCLM: 435/069.100
INCLS: 435/069.400; 435/071.100; 435/252.300; 435/032.500; 435/320.100; 435/471.000; 536/023.500; 530/350.000
NCL NCLM: 435/069.100
NCLS: 435/069.400; 435/071.100; 435/252.300; 435/320.100; 435/325.000; 435/471.000; 530/350.000; 536/023.500

L23 ANSWER 7 OF 21 USPATFULL
ACCESSION NUMBER: 2002:188124 USPATFULL
TITLE: Group B Streptococcus vaccine
INVENTOR(S): Michel, James L., Chestnut Hill, MA, United States
Madoff, Lawrence C., Brookline, MA, United States
Kasper, Dennis L., Newton Centre, MA, United States
PATENT ASSIGNEE(S): The Brigham and Women's Hospital Inc., Boston, MA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6426074	B1	20020730
APPLICATION INFO.:	US 1998-40181		19980318 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 1997-39353P	19970319 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Graser, Jennifer E.
LEGAL REPRESENTATIVE: Sterne, Kessler, Goldstein & Fox P.L.L.C.
NUMBER OF CLAIMS: 9
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 22 Drawing Figure(s); 16 Drawing Page(s)
LINE COUNT: 2700
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention concerns a vaccine capable of protecting a recipient from infection caused group B Streptococcus. The vaccine comprises polysaccharide-protein moieties or protein moieties without a polysaccharide. The vaccine can contain, inter alia, (a) a group B Streptoccus polysaccharide conjugated to (b) either the N-terminal

region of the epsilon antigen, a fragment thereof or their functional derivatives such that the vaccine retains the ability to elicit protective antibodies against group B Streptoccus. The vaccine may contain only one type of such polysaccharide-protein unit or may contain a mixture of more than one type of unit. Alternatively, the vaccine may contain antigens from different species of Group B Streptococcus. Additionally, the invention concerns a passive vaccine obtained following immunization with either the capsular polysaccharide-protein conjugate or the non-conjugated protein.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

INCL INCLM: 424/244.100
INCLS: 424/184.100; 424/193.100; 424/197.110; 424/203.100; 530/350.000; 536/123.100
NCL NCLM: 424/244.100
NCLS: 424/184.100; 424/193.100; 424/197.110; 424/203.100; 530/350.000; 536/123.100

L23 ANSWER 8 OF 21 USPATFULL

ACCESSION NUMBER: 2002:133468 USPATFULL
TITLE: 32 human secreted proteins
INVENTOR(S): Ni, Jian, Germantown, MD, UNITED STATES
Baker, Kevin P., Darnestown, MD, UNITED STATES
Birse, Charles E., North Potomac, MD, UNITED STATES
Ebner, Reinhard, Gaithersburg, MD, UNITED STATES
Fiscella, Michele, Bethesda, MD, UNITED STATES
Komatsoulis, George A., Silver Spring, MD, UNITED STATES
LaFleur, David W., Washington, DC, UNITED STATES
Moore, Paul A., Germantown, MD, UNITED STATES
Olsen, Henrik S., Gaithersburg, MD, UNITED STATES
Rosen, Craig A., Laytonsville, MD, UNITED STATES
Ruben, Steven M., Olney, MD, UNITED STATES
Soppet, Daniel R., Centreville, VA, UNITED STATES
Young, Paul E., Gaithersburg, MD, UNITED STATES
Wei, Ping, Brookeville, MD, UNITED STATES
Florence, Kimberly A., Rockville, MD, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002068319	A1	20020606
APPLICATION INFO.:	US 2001-800729	A1	20010308 (9)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. WO 2000-US26013, filed on 22 Sep 2000, UNKNOWN

	NUMBER	DATE
PRIORITY INFORMATION:	US 1999-155709P	19990924 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850
NUMBER OF CLAIMS: 23
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 22 Drawing Page(s)

LINE COUNT: 36956
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to novel human secreted proteins and isolated nucleic acids containing the coding regions of the genes encoding such proteins. Also provided are vectors, host cells, antibodies, and recombinant methods for producing human secreted proteins. The invention further relates to diagnostic and therapeutic methods useful for diagnosing and treating diseases, disorders, and/or conditions related to these novel human secreted proteins.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
INCL INCLM: 435/069.100
INCLS: 435/007.100; 435/325.000; 435/183.000; 536/023.500; 530/388.100
NCL NCLM: 435/069.100
NCLS: 435/007.100; 435/325.000; 435/183.000; 536/023.500; 530/388.100

L23 ANSWER 9 OF 21 USPATFULL
ACCESSION NUMBER: 2002:119846 USPATFULL
TITLE: Human G-protein Chemokine receptor (CCR5) HDGNR10
INVENTOR(S): Rosen, Craig A., Laytonsville, MD, UNITED STATES
Roschke, Viktor, Rockville, MD, UNITED STATES
Li, Yi, Sunnyvale, CA, UNITED STATES
Ruben, Steven M., Olney, MD, UNITED STATES

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2002061834	A1	20020523	
APPLICATION INFO.:	US 2001-779880	A1	20010209	(9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2000-181258P	20000209 (60)
	US 2000-187999P	20000309 (60)
	US 2000-234336P	20000922 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: STERNE, KESSLER, GOLDSTEIN & FOX PLLC, 1100 NEW YORK AVENUE, N.W., SUITE 600, WASHINGTON, DC, 20005-3934
NUMBER OF CLAIMS: 61
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 4 Drawing Page(s)
LINE COUNT: 18667
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to a novel human protein called Human G-protein Chemokine Receptor (CCR5) HDGNR10, and isolated polynucleotides encoding this protein. The invention is also directed to human antibodies that bind Human G-protein Chemokine Receptor (CCR5) HDGNR10 and to polynucleotides encoding those antibodies. Also provided are vectors, host cells, antibodies, and recombinant methods for producing Human G-protein Chemokine Receptor (CCR5) HDGNR10 and human anti-Human G-protein Chemokine Receptor (CCR5) HDGNR10 antibodies. The invention further relates to diagnostic and therapeutic methods useful for diagnosing and treating diseases, disorders, and/or conditions related to this

novel human protein and these novel human antibodies.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
INCL INCLM: 514/001.000
INCLS: 530/350.000; 536/023.500; 435/325.000; 435/320.100; 435/069.100
NCL NCLM: 514/001.000
NCLS: 530/350.000; 536/023.500; 435/325.000; 435/320.100; 435/069.100

L23 ANSWER 10 OF 21 USPATFULL
ACCESSION NUMBER: 2002:106279 USPATFULL
TITLE: Prevention and treatment of streptococcal and staphylococcal infection
INVENTOR(S): Wessels, Michael R., Brookline, MA, UNITED STATES
Cywes, Colette, Brookline, MA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002055488	A1	20020509
APPLICATION INFO.:	US 2001-960621	A1	20010921 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2000-234145P	20000921 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: Edward R. Gates, Esq., Wolf, Greenfield & Sacks, P.C., 600 Atlantic Avenue, Boston, MA, 02210
NUMBER OF CLAIMS: 90
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 8 Drawing Page(s)
LINE COUNT: 1664
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention provides new methods for use in prevention and treatment of streptococcal and staphylococcal infection.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
INCL INCLM: 514/054.000
NCL NCLM: 514/054.000

L23 ANSWER 11 OF 21 USPATFULL
ACCESSION NUMBER: 2002:92268 USPATFULL
TITLE: Human G-protein Chemokine Receptor HDGNR10
INVENTOR(S): Rosen, Craig A., Laytonsville, MD, UNITED STATES
Roschke, Viktor, Rockville, MD, UNITED STATES
Li, Yi, Sunnyvale, CA, UNITED STATES
Ruben, Steven M., Olney, MD, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002048786	A1	20020425
APPLICATION INFO.:	US 2001-779879	A1	20010209 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2000-181258P	20000209 (60)
	US 2000-187999P	20000309 (60)

US 2000-234336P 20000922 (60)
DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: STERNE, KESSLER, GOLDSTEIN & FOX PLLC, 1100 NEW YORK AVENUE, N.W., SUITE 600, WASHINGTON, DC, 20005-3934
NUMBER OF CLAIMS: 61
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 4 Drawing Page(s)
LINE COUNT: 17969
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to a novel human protein called Human G-protein Chemokine Receptor (CCR5) HDGNR10, and isolated polynucleotides encoding this protein. The invention is also directed to human antibodies that bind Human G-protein Chemokine Receptor (CCR5) HDGNR10 and to polynucleotides encoding those antibodies. Also provided are vectors, host cells, antibodies, and recombinant methods for producing Human G-protein Chemokine Receptor (CCR5) HDGNR10 and human anti-Human G-protein Chemokine Receptor (CCR5) HDGNR10 antibodies. The invention further relates to diagnostic and therapeutic methods useful for diagnosing and treating diseases, disorders, and/or conditions related to this novel human protein and these novel human antibodies.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
INCL INCLM: 435/069.100
INCLS: 536/023.500; 424/130.100; 514/012.000; 435/007.200; 435/325.000
NCL NCLM: 435/069.100
NCLS: 536/023.500; 424/130.100; 514/012.000; 435/007.200; 435/325.000

L23 ANSWER 12 OF 21 USPATFULL
ACCESSION NUMBER: 2002:43671 USPATFULL
TITLE: 49 human secreted proteins
INVENTOR(S): Moore, Paul A., Germantown, MD, UNITED STATES
Ruben, Steven M., Olney, MD, UNITED STATES
Olsen, Henrik S., Gaithersburg, MD, UNITED STATES
Shi, Yanggu, Gaithersburg, MD, UNITED STATES
Rosen, Craig A., Laytonsville, MD, UNITED STATES
Florence, Kimberly A., Rockville, MD, UNITED STATES
Soppet, Daniel R., Centreville, VA, UNITED STATES
LaFleur, David W., Washington, DC, UNITED STATES
Endress, Gregory A., Potomac, MD, UNITED STATES
Ebner, Reinhard, Gaithersburg, MD, UNITED STATES
Komatsoulis, George, Silver Spring, MD, UNITED STATES
Duan, Roxanne D., Bethesda, MD, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002026040	A1	20020228
APPLICATION INFO.:	US 2001-904615	A1	20010716 (9)

RELATED APPLN. INFO.: Continuation of Ser. No. US 2000-739254, filed on 19 Dec 2000, PENDING Continuation of Ser. No. US 2000-511554, filed on 23 Feb 2000, ABANDONED Continuation-in-part of Ser. No. WO 1999-US19330,

filed on 24 Aug 1999, UNKNOWN

	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-97917P	19980825 (60)
	US 1998-98634P	19980831 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850
NUMBER OF CLAIMS: 23
EXEMPLARY CLAIM: 1
LINE COUNT: 19401
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel human secreted proteins and isolated nucleic acids containing the coding regions of the genes encoding such proteins. Also provided are vectors, host cells, antibodies, and recombinant methods for producing human secreted proteins. The invention further relates to diagnostic and therapeutic methods useful for diagnosing and treating diseases, disorders, and/or conditions related to these novel human secreted proteins.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
INCL INCLM: 536/023.100
INCLS: 435/006.000; 530/300.000
NCL NCLM: 536/023.100
NCLS: 435/006.000; 530/300.000

L23 ANSWER 13 OF 21 USPATFULL
ACCESSION NUMBER: 2002:19062 USPATFULL
TITLE: Immunogenic composition for group B Streptococcus
INVENTOR(S): Michel, James L., Waban, MA, United States
Kasper, Dennis L., Newton Centre, MA, United States
Ausubel, Frederick M., Newton, MA, United States
Madoff, Lawrence C., Boston, MA, United States
PATENT ASSIGNEE(S): The General Hospital Corporation & Brigham and Women's Hospital, Boston, MA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6342223	B1	20020129
APPLICATION INFO.:	US 1999-346290		19990720 (9)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1995-469014, filed on 5 Jun 1995, now patented, Pat. No. US 5968521
Division of Ser. No. US 1994-363311, filed on 22 Dec 1994, now patented, Pat. No. US 5648241
Continuation of Ser. No. US 1992-968866, filed on 2 Nov 1992, now abandoned Continuation-in-part of Ser. No. US 1989-408036, filed on 15 Sep 1989, now abandoned
DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Brusca, John S.
LEGAL REPRESENTATIVE: Strerne, Kessler, Goldstein & Fox, P.L.L.C.
NUMBER OF CLAIMS: 5

EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 14 Drawing Figure(s); 11 Drawing Page(s)
LINE COUNT: 3134
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A vaccine capable of protecting a recipient from infection caused by group B Streptococcus. The vaccine provides polysaccharide-protein moieties and contain (a) a group B Streptococcus polysaccharide conjugated to (b) a functional derivative of a group B Streptococcus C protein alpha antigen that retains the ability to elicit protective antibodies against group B Streptococcus. The vaccine may contain only one type of such polysaccharide-protein unit or may contain a mixture of more than one type of unit.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
INCL INCLM: 424/190.100
INCLS: 530/350.000
NCL NCLM: 424/190.100
NCLS: 530/350.000

L23 ANSWER 14 OF 21 USPATFULL
ACCESSION NUMBER: 2001:155766 USPATFULL
TITLE: 49 human secreted proteins
INVENTOR(S): Moore, Paul A., Germantown, MD, United States
Ruben, Steven M., Oley, MD, United States
Olsen, Henrik S., Gaithersburg, MD, United States
Shi, Yanggu, Gaithersburg, MD, United States
Rosen, Craig A., Laytonsville, MD, United States
Florence, Kimberly A., Rockville, MD, United States
Soppet, Daniel R., Centreville, VA, United States
Lafleur, David W., Washington, DC, United States
Endress, Gregory A., Potomac, MD, United States
Ebner, Reinhard, Gaithersburg, MD, United States
Komatsoulis, George, Silver Spring, MD, United States
Duan, Roxanne D., Bethesda, MD, United States

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2001021700	A1	20010913
APPLICATION INFO.:	US 2000-739254	A1	20001219 (9)

RELATED APPLN. INFO.: Continuation of Ser. No. US 2000-511554, filed on 23 Feb 2000, ABANDONED Continuation-in-part of Ser. No. WO 1999-US19330, filed on 24 Aug 1999, UNKNOWN

	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-97917P	19980825 (60)
	US 1998-98634P	19980831 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: HUMAN GENOME SCIENCES INC, 9410 KEY WEST AVENUE, ROCKVILLE, MD, 20850
NUMBER OF CLAIMS: 23
EXEMPLARY CLAIM: 1
LINE COUNT: 15462

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to novel human secreted proteins and isolated nucleic acids containing the coding regions of the genes encoding such proteins. Also provided are vectors, host cells, antibodies, and recombinant methods for producing human secreted proteins. The invention further relates to diagnostic and therapeutic methods useful for diagnosing and treating diseases, disorders, and/or conditions related to these novel human secreted proteins.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
INCL INCLM: 514/044.000
INCLS: 536/023.500; 530/350.000; 530/388.200; 435/320.100; 435/007.100; 435/069.100; 435/069.700; 435/325.000; 514/012.000
NCL NCLM: 514/044.000
NCLS: 536/023.500; 530/350.000; 530/388.200; 435/320.100; 435/007.100; 435/069.100; 435/069.700; 435/325.000; 514/012.000

L23 ANSWER 15 OF 21 USPATFULL
ACCESSION NUMBER: 1999:128140 USPATFULL
TITLE: Conjugate vaccine for group B Streptococcus
INVENTOR(S): Michel, James L., Waban, MA, United States
Kasper, Dennis L., Newton Centre, MA, United States
Ausubel, Frederick M., Newton, MA, United States
Madoff, Lawrence C., Boston, MA, United States
PATENT ASSIGNEE(S): The General Hospital Corporation, Boston, MA, United States (U.S. corporation)
Brigham and Women's Hospital, Boston, MA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5968521		19991019
APPLICATION INFO.:	US 1995-469014		19950605 (8)

RELATED APPLN. INFO.: Division of Ser. No. US 1994-363311, filed on 22 Dec 1994, now patented, Pat. No. US 5648241 which is a continuation of Ser. No. US 1992-968866, filed on 2 Nov 1992, now abandoned which is a continuation-in-part of Ser. No. US 1989-408036, filed on 15 Sep 1989, now abandoned
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Ketter, James
ASSISTANT EXAMINER: Brusca, John S.
LEGAL REPRESENTATIVE: Sterne, Kessler, Goldstein & Fox P.L.L.C.
NUMBER OF CLAIMS: 23
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 14 Drawing Figure(s); 11 Drawing Page(s)
LINE COUNT: 3407
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A vaccine capable of protecting a recipient from infection caused by group B Streptococcus. The vaccine provides polysaccharide-protein moieties and contain (a) a group B Streptococcus polysaccharide conjugated to (b) a functional derivative of a group B Streptococcus C protein alpha antigen that

retains the ability to elicit protective antibodies against group B Streptococcus. The vaccine may contain only one type of such polysaccharide-protein unit or may contain a mixture of more than one type of unit.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
INCL INCLM: 424/197.110
INCLS: 424/244.100; 530/403.000
NCL NCLM: 424/197.110
NCLS: 424/244.100; 530/403.000

L23 ANSWER 16 OF 21 USPATFULL

ACCESSION NUMBER:	1999:63102 USPATFULL
TITLE:	Conjugate vaccine for group B streptococcus
INVENTOR(S):	Michel, James L., Waban, MA, United States Kasper, Dennis L., Newton Centre, MA, United States Ausubel, Frederick M., Newton, MA, United States Madoff, Lawrence C., Boston, MA, United States
PATENT ASSIGNEE(S):	The General Hospital Corporation, Boston, MA, United States (U.S. corporation) Brigham and Women's Hospital, Boston, MA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5908629		19990601
APPLICATION INFO.:	US 1995-467147		19950606 (8)

RELATED APPLN. INFO.:	Division of Ser. No. US 1994-363311, filed on 22 Dec 1994, now patented, Pat. No. US 5648241 which is a continuation of Ser. No. US 1992-968866, filed on 2 Nov 1992, now abandoned which is a continuation-in-part of Ser. No. US 1989-408036, filed on 15 Sep 1989, now abandoned
DOCUMENT TYPE:	Utility
FILE SEGMENT:	Granted
PRIMARY EXAMINER:	Ketter, James
ASSISTANT EXAMINER:	Brusca, John S.
LEGAL REPRESENTATIVE:	Sterne, Kessler, Goldstein & Fox P.L.L.C.
NUMBER OF CLAIMS:	21
EXEMPLARY CLAIM:	2
NUMBER OF DRAWINGS:	14 Drawing Figure(s); 11 Drawing Page(s)
LINE COUNT:	3278

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A vaccine capable of protecting a recipient from infection caused by group B Streptococcus. The vaccine provides polysaccharide-protein moieties and contain (a) a group B Streptococcus polysaccharide conjugated to (b) a functional derivative of a group B Streptococcus C protein alpha antigen that retains the ability to elicit protective antibodies against group B Streptococcus. The vaccine may contain only one type of such polysaccharide-protein unit or may contain a mixture of more than one type of unit.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
INCL INCLM: 424/197.110
INCLS: 424/244.100; 530/403.000
NCL NCLM: 424/197.110

NCLS: 424/244.100; 530/403.000

L23 ANSWER 17 OF 21 USPATFULL
ACCESSION NUMBER: 1999:4035 USPATFULL
TITLE: Conjugate vaccine for group B Streptococcus
INVENTOR(S): Michel, James L., Waban, MA, United States
Kasper, Dennis L., Newton Centre, MA, United States
Ausubel, Frederick M., Newton, MA, United States
Madoff, Lawrence C., Boston, MA, United States
PATENT ASSIGNEE(S): The General Hospital Corporation, Boston, MA, United States (U.S. corporation)
Brigham and Women's Hospital, Boston, MA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5858362		19990112
APPLICATION INFO.:	US 1995-466210		19950606 (8)

RELATED APPLN. INFO.: Division of Ser. No. US 1994-363311, filed on 22 Dec 1994, now patented, Pat. No. US 5648241 which is a continuation of Ser. No. US 1992-968866, filed on 2 Nov 1992, now abandoned which is a continuation-in-part of Ser. No. US 1989-408036, filed on 15 Sep 1989, now abandoned
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Ketter, James
ASSISTANT EXAMINER: Brusca, John S.
LEGAL REPRESENTATIVE: Sterne, Kessler, Goldstein & Fox P.L.L.C.
NUMBER OF CLAIMS: 20
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 12 Drawing Figure(s); 11 Drawing Page(s)
LINE COUNT: 3188
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A vaccine capable of protecting a recipient from infection caused by group B Streptococcus. The vaccine provides polysaccharide-protein moieties and contain (a) a group B Streptococcus polysaccharide conjugated to (b) a functional derivative of a group B Streptococcus C protein alpha antigen that retains the ability to elicit protective antibodies against group B Streptococcus. The vaccine may contain only one type of such polysaccharide-protein unit or may contain a mixture of more than one type of unit.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
INCL INCLM: 424/165.100
INCLS: 424/197.110; 435/069.300; 530/403.000
NCL NCLM: 424/165.100
NCLS: 424/197.110; 435/069.300; 530/403.000

L23 ANSWER 18 OF 21 USPATFULL
ACCESSION NUMBER: 1998:154381 USPATFULL
TITLE: Conjugate vaccine for group B Streptococcus
INVENTOR(S): Michel, James L., Waban, MA, United States
Kasper, Dennis L., Newton Centre, MA, United States
Ausubel, Frederick M., Newton, MA, United States

	Madoff, Lawrence C., Boston, MA, United States
PATENT ASSIGNEE(S):	The General Hospital Corp., Charlestown, MA, United States (U.S. corporation) The Brigham and Women's Hospital, Boston, MA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5847081		19981208
APPLICATION INFO.:	US 1995-462679		19950605 (8)

RELATED APPLN. INFO.: Division of Ser. No. US 1994-363311, filed on 22 Dec 1994, now patented, Pat. No. US 5648241 which is a continuation of Ser. No. US 1992-968866, filed on 2 Nov 1992, now abandoned which is a continuation-in-part of Ser. No. US 1989-408036, filed on 15 Sep 1989, now abandoned

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Ketter, James
ASSISTANT EXAMINER: Brusca, John S.
LEGAL REPRESENTATIVE: Sterne, Kessler, Goldstein & Fox P.L.L.C.
NUMBER OF CLAIMS: 17
EXEMPLARY CLAIM: 5
NUMBER OF DRAWINGS: 14 Drawing Figure(s); 11 Drawing Page(s)
LINE COUNT: 3048
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A vaccine capable of protecting a recipient from infection caused by group B Streptococcus. The vaccine provides polysaccharide-protein moieties and contain (a) a group B Streptococcus polysaccharide conjugated to (b) a functional derivative of a group B Streptococcus C protein alpha antigen that retains the ability to elicit protective antibodies against group B Streptococcus. The vaccine may contain only one type of such polysaccharide-protein unit or may contain a mixture of more than one type of unit.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
INCL INCLM: 530/350.000
INCLS: 435/253.400
NCL NCLM: 530/350.000
NCLS: 435/253.400

L23 ANSWER 19 OF 21 USPATFULL
ACCESSION NUMBER: 1998:150465 USPATFULL
TITLE: Conjugate vaccine for group B streptococcus
INVENTOR(S): Michel, James L., Waban, MA, United States
Kasper, Dennis L., Newton, MA, United States
Ausubel, Frederick M., Newton, MA, United States
Madoff, Lawrence C., Boston, MA, United States
PATENT ASSIGNEE(S): The General Hospital Corporation, Boston, MA, United States (U.S. corporation)
Brigham and Women's Hospital, Boston, MA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5843444		19981201
APPLICATION INFO.:	US 1995-470445		19950606 (8)

RELATED APPLN. INFO.: Division of Ser. No. US 1994-363311, filed on 22 Dec 1994, now patented, Pat. No. US 5648241 which is a continuation of Ser. No. US 1992-968866, filed on 2 Nov 1992, now abandoned which is a continuation-in-part of Ser. No. US 1989-408036, filed on 15 Sep 1989, now abandoned
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Ketter, James
ASSISTANT EXAMINER: Brusca, John S.
LEGAL REPRESENTATIVE: Sterne, Kessler, Goldstein & Fox P.L.L.C.
NUMBER OF CLAIMS: 19
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 14 Drawing Figure(s); 11 Drawing Page(s)
LINE COUNT: 3183
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A vaccine capable of protecting a recipient from infection caused by group B Streptococcus. The vaccine provides polysaccharide-protein moieties and contain (a) a group B Streptococcus polysaccharide conjugated to (b) a functional derivative of a group B Streptococcus C protein alpha antigen that retains the ability to elicit protective antibodies against group B Streptococcus. The vaccine may contain only one type of such polysaccharide-protein unit or may contain a mixture of more than one type of unit.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
INCL INCLM: 424/165.100
INCLS: 424/197.110; 424/244.100; 530/403.000
NCL NCLM: 424/165.100
NCLS: 424/197.110; 424/244.100; 530/403.000

L23 ANSWER 20 OF 21 USPATFULL
ACCESSION NUMBER: 1998:124194 USPATFULL
TITLE: Conjugate vaccine for group B streptococcus
INVENTOR(S): Michel, James L., Waban, MA, United States
Kasper, Dennis L., Newton Centre, MA, United States
Ausubel, Frederick M., Newton, MA, United States
Madoff, Lawrence C., Boston, MA, United States
PATENT ASSIGNEE(S): The General Hospital Corp., Charlestown, MA, United States (U.S. corporation)
The Brigham and Women's Hospital, Boston, MA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5820860		19981013
APPLICATION INFO.:	US 1995-463288		19950605 (8)

RELATED APPLN. INFO.: Division of Ser. No. US 1994-363311, filed on 22 Dec 1994, now patented, Pat. No. US 5648241 which is a continuation of Ser. No. US 1992-968866, filed on 2 Nov 1992, now abandoned which is a continuation-in-part of Ser. No. US 1989-408036, filed on 15 Sep 1989, now abandoned
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Degen, Nancy

ASSISTANT EXAMINER: Brusca, John S.
LEGAL REPRESENTATIVE: Sterne, Kessler, Goldstein & Fox P.L.L.C.
NUMBER OF CLAIMS: 31
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 14 Drawing Figure(s); 11 Drawing Page(s)
LINE COUNT: 3234
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A vaccine capable of protecting a recipient from infection caused by group B Streptococcus. The vaccine provides polysaccharide-protein moieties and contain (a) a group B Streptococcus polysaccharide conjugated to (b)) a functional derivative of a group B Streptococcus C protein alpha antigen that retains the ability to elicit protective antibodies against group B Streptococcus. The vaccine may contain only one type of such polysaccharide-protein unit or may contain a mixture of more than one type of unit.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
INCL INCLM: 424/165.100
INCLS: 424/197.110; 530/403.000
NCL NCLM: 424/165.100
NCLS: 424/197.110; 530/403.000

L23 ANSWER 21 OF 21 USPATFULL
ACCESSION NUMBER: 97:61577 USPATFULL
TITLE: Conjugate vaccine against group B streptococcus
INVENTOR(S): Michel, James L., Waban, MA, United States
Kasper, Dennis L., Newton Centre, MA, United States
Ausubel, Frederick M., Newton, MA, United States
Madoff, Lawrence C., Boston, MA, United States
PATENT ASSIGNEE(S): The General Hospital Corporation, Charlestown, MA, United States (U.S. corporation)
Brigham and Women's Hospital, Boston, MA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5648241		19970715
APPLICATION INFO.:	US 1994-363311		19941222 (8)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1992-968866, filed on 2 Nov 1992, now abandoned which is a continuation-in-part of Ser. No. US 1989-408036, filed on 15 Sep 1989, now abandoned
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Ketter, James
ASSISTANT EXAMINER: Brusca, John S.
LEGAL REPRESENTATIVE: Sterne, Kessler, Goldstein & Fox P.L.L.C.
NUMBER OF CLAIMS: 24
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 12 Drawing Figure(s); 11 Drawing Page(s)
LINE COUNT: 2876
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A purified DNA molecule is disclosed that comprises a DNA sequence encoding a Group B Streptococcus alpha antigen or antibody eliciting fragment. The alpha antigen sequence encodes several distinct domains including an N-terminal sequence that precedes

the start of the alpha antigen repeating sequence, a C-terminal anchor sequence and a repeating unit motif. The ability to protect mice against a Streptococcus infection with antisera against cellular extracts containing the alpha antigen encoded by the DNA molecule was determined.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
INCL INCLM: 435/069.300
INCLS: 435/252.330; 435/253.400; 435/320.100; 536/023.700
NCL NCLM: 435/069.300
NCLS: 435/252.330; 435/253.400; 435/320.100; 536/023.700

(FILE 'HCAPLUS, MEDLINE, BIOSIS, EMBASE, WPIDS, CONFSCI, SCISEARCH, JICST-EPLUS, JAPIO, USPATFULL' ENTERED AT 15:44:32 ON 25 FEB 2003)

Author(s)

L24	6380	SEA	ABB=ON PLU=ON	"HUGHES M"?/AU
L25	198	SEA	ABB=ON PLU=ON	"SANTANGELO J"?/AU
L26	5263	SEA	ABB=ON PLU=ON	"LANE J"?/AU
L27	26255	SEA	ABB=ON PLU=ON	"MOORE J"?/AU
L28	1293	SEA	ABB=ON PLU=ON	"DOBSON R"?/AU
L29	117	SEA	ABB=ON PLU=ON	"EVEREST P"?/AU
L30	1523	SEA	ABB=ON PLU=ON	"DOUGAN G"?/AU
L31	28105	SEA	ABB=ON PLU=ON	"WILSON R"?/AU
L32	6	SEA	ABB=ON PLU=ON	L24 AND L25 AND L26 AND L27 AND L28 AND L29 AND L30 AND L31
L33	28	SEA	ABB=ON PLU=ON	L24 AND (L25 OR L26 OR L27 OR L28 OR L29 OR L30 OR L31)
L34	24	SEA	ABB=ON PLU=ON	L25 AND (L26 OR L27 OR L28 OR L29 OR L30 OR L31)
L35	14	SEA	ABB=ON PLU=ON	L26 AND (L27 OR L28 OR L29 OR L30 OR L31)
L36	43	SEA	ABB=ON PLU=ON	L27 AND (L28 OR L29 OR L30 OR L31)
L37	12	SEA	ABB=ON PLU=ON	L28 AND (L29 OR L30 OR L31)
L38	90	SEA	ABB=ON PLU=ON	L29 AND (L30 OR L31)
L39	14	SEA	ABB=ON PLU=ON	L30 AND L31
L40	15	SEA	ABB=ON PLU=ON	(L33 OR L34 OR L36 OR L38 OR L24 OR L25 OR L26 OR L27 OR L28 OR L29 OR L30 OR L31) AND L2
L41	31	SEA	ABB=ON PLU=ON	L32 OR L35 OR L37 OR L39 OR L40
L42	12	DUP REM	L41 (19 DUPLICATES REMOVED)	

L42 ANSWER 1 OF 12 HCAPLUS COPYRIGHT 2003 ACS DUPLICATE 1
ACCESSION NUMBER: 2002:716313 HCAPLUS
DOCUMENT NUMBER: 137:243156
TITLE: Group B Streptococcus out surface protein gene phos2-2 and its use in antimicrobial therapy and drug screening
INVENTOR(S): **Santangelo, Joseph David**; Feldman, Robert; **Lane, Jonathan Douglas**; **Moore, Joanne Christine**; **Dobson, Richard James**; **Hughes, Martin John Glenton**; **Wilson, Rebecca Kerry**; **Everest, Paul**; **Dougan, Gordon**
PATENT ASSIGNEE(S): Microscience Limited, UK
SOURCE: PCT Int. Appl., 23 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002072623	A1	20020919	WO 2002-GB1089	20020311

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: GB 2001-5922 A 20010309

AB A protein from Group B Streptococcus GBS is shown to be an outer surface protein and is a useful target for antimicrobial therapy. Specifically, gene phos2-2 is isolated from GBS strain M732 using a leaderless phoA vector. The out surface expression of phos2-2 gene is detected by its antisera raised in rabbit. The phos2-2 protein offers significant protection against GBS infection (challenged with strain A909) compared to the PBS control and another GBS outer surface protein phos3-9 when it is used to immunize rat. The phos2-2 gene and product are useful in screening for and development of novel antibacterial agents and vaccines.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L42 ANSWER 2 OF 12 HCAPLUS COPYRIGHT 2003 ACS DUPLICATE 2

ACCESSION NUMBER: 2002:150614 HCAPLUS

DOCUMENT NUMBER: 136:290717

TITLE: Identification of major outer surface proteins of Streptococcus agalactiae

AUTHOR(S): Hughes, Martin J. G.; **Moore, Joanne C.**; **Lane, Jonathan D.**; **Wilson, Rebecca**; Pribul, Philippa K.; Younes, Zabin N.; **Dobson, Richard J.**; **Everest, Paul**; Reason, Andrew J.; Redfern, Joanne M.; Greer, Fiona M.; Paxton, Thanai; Panico, Maria; Morris, Howard R.; Feldman, Robert G.; Santangelo, Joseph D.

CORPORATE SOURCE: Microscience Ltd., Wokingham, UK

SOURCE: Infection and Immunity (2002), 70(3), 1254-1259
CODEN: INFIBR; ISSN: 0019-9567

PUBLISHER: American Society for Microbiology

DOCUMENT TYPE: Journal

LANGUAGE: English

AB To identify the major outer surface proteins of Streptococcus agalactiae (group B streptococcus), a proteomic anal. was undertaken. An ext. of the outer surface proteins was sepd. by two-dimensional electrophoresis. The visualized spots were identified through a combination of peptide sequencing and reverse genetic methodologies. Of the 30 major spots identified as S. agalactiae specific, 27 have been identified. Six of these proteins, previously unidentified in S. agalactiae, were sequenced and cloned. These were ornithine carbamoyl-transferase,

phosphoglycerate kinase, nonphosphorylating glyceraldehyde-3-phosphate dehydrogenase, purine nucleoside phosphorylase, enolase, and glucose-6-phosphate isomerase. Using a gram-pos. expression system, we have overexpressed two of these proteins in an in vitro system. These recombinant, purified proteins were used to raise antisera. The identification of these proteins as residing on the outer surface was confirmed by the ability of the antisera to react against whole, live bacteria. Further, in a neonatal-animal model system, we demonstrate that some of these sera are protective against LDs of bacteria. These studies demonstrate the successful application of proteomics as a technique for identifying vaccine candidates.

REFERENCE COUNT: 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L42 ANSWER 3 OF 12 HCAPLUS COPYRIGHT 2003 ACS DUPLICATE 3
ACCESSION NUMBER: 2001:591700 HCAPLUS
DOCUMENT NUMBER: 135:302555
TITLE: Age-dependent presence of antibodies in rat dams, capable of conferring protection against **group B Streptococcus infection** in neonates
AUTHOR(S): **Moore, J. C.**; Muckett, P. J.; **Hughes, M. J. G.**
CORPORATE SOURCE: Microscience Ltd., Wokingham, RG41 5TU, UK
SOURCE: FEMS Microbiology Letters (2001), 202(1), 125-127
CODEN: FMLED7; ISSN: 0378-1097
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB A rat model was used to investigate maternal age-dependent resistance on group B Streptococcus (GBS)-induced mortality of the offspring. Offspring from young (first time) or older (repeat litters) dams were challenged with GBS. There was an approx. log difference in the dose of GBS required to cause identical levels of mortality in the two groups. The sera of the dams from both groups were analyzed by whole-cell ELISA, and it was demonstrated that sera from the older dams possessed circulating IgG cross-reactive to GBS. Since IgG is transplacentally transferred, the authors conclude that this is the method of obsd. protection.

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L42 ANSWER 4 OF 12 HCAPLUS COPYRIGHT 2003 ACS DUPLICATE 4
ACCESSION NUMBER: 2000:441940 HCAPLUS
DOCUMENT NUMBER: 133:69844
TITLE: Genes and outer surface proteins of Group B Streptococcus and development of novel antibacterial agents and vaccines
INVENTOR(S): **Hughes, Martin John Glenton; Santangelo, Joseph David; Lane, Jonathan Douglas; Everest, Paul;** Feldman, Robert; **Moore, Joanne Christine ; Wilson, Rebecca Kerry; Dobson, Richard James; Dougan, Gordon**

PATENT ASSIGNEE(S): Microscience Limited, UK
SOURCE: PCT Int. Appl., 63 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000037646	A2	20000629	WO 1999-GB4377	19991222
WO 2000037646	A3	20001026		
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1141308	A2	20011010	EP 1999-962422	19991222
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
BR 9916474	A	20020924	BR 1999-16474	19991222
JP 2002533083	T2	20021008	JP 2000-589700	19991222
NO 2001003102	A	20010810	NO 2001-3102	20010621

PRIORITY APPLN. INFO.:

GB 1998-28345	A	19981222
GB 1998-28349	A	19981222
GB 1998-28350	A	19981222
GB 1998-28352	A	19981222
GB 1998-28353	A	19981222
GB 1998-28354	A	19981222
GB 1998-28355	A	19981222
GB 1998-28356	A	19981222
GB 1998-28357	A	19981222
GB 1998-28359	A	19981222
GB 1999-82	A	19990104
GB 1999-83	A	19990104
GB 1999-84	A	19990104
GB 1999-85	A	19990104
GB 1999-86	A	19990104
GB 1999-1916	A	19990128
GB 1999-1922	A	19990128
WO 1999-GB4377	W	19991222

AB According to the present invention, a series of genes are identified in Group B Streptococcus (GBS), the products of which may be assocd. with the outer surface of the organism. A no. of clones were selected from GBS (strain M732) genetic library each contg. a gene (or part thereof), which complemented the leaderless alk. phosphatase gene phoA from E. coli. The gene and gene product may of use in diagnosis and identification of the pathogen and in screening and development of novel antibacterial agents and vaccines.

L42 ANSWER 5 OF 12 HCAPLUS COPYRIGHT 2003 ACS DUPLICATE 5
ACCESSION NUMBER: 2000:441815 HCAPLUS
DOCUMENT NUMBER: 133:84229

TITLE: Outer surface proteins, their genes, and their use

INVENTOR(S): **Hughes, Martin John Glenton; Santangelo, Joseph David; Lane, Jonathan Douglas;** Feldman, Robert; **Moore, Joanne Christine; Everest, Paul; Dobson, Richard James;** Henwood, Caroline Joanne; **Dougan, Gordon ; Wilson, Rebecca Kerry**

PATENT ASSIGNEE(S): Microscience Limited, UK

SOURCE: PCT Int. Appl., 32 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000037490	A2	20000629	WO 1999-GB4376	19991222
WO 2000037490	A3	20010920		
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1140994	A1	20011010	EP 1999-962421	19991222
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
BR 9916473	A	20020115	BR 1999-16473	19991222
JP 2002533065	T2	20021008	JP 2000-589559	19991222
NO 2001003101	A	20010813	NO 2001-3101	20010621

PRIORITY APPLN. INFO.:

GB 1998-28346	A	19981222
GB 1999-1233	A	19990120
GB 1999-1234	A	19990120
GB 1999-8321	A	19990412
GB 1999-12036	A	19990524
GB 1999-22596	A	19990923
WO 1999-GB4376	W	19991222

AB According to the present invention, a series of genes are identified in Group B Streptococcus, the products of which may be located on the outer surface of the organism. The genes, or functional fragments thereof, may be useful in the prepn. of therapeutics, e.g. vaccines for the immunization of a patient against microbial infection.

L42 ANSWER 6 OF 12 HCAPLUS COPYRIGHT 2003 ACS DUPLICATE 6

ACCESSION NUMBER: 2001:62248 HCAPLUS

DOCUMENT NUMBER: 135:148053

TITLE: Comparison of the Escherichia coli K-12 genome with sampled genomes of a Klebsiella pneumoniae and three Salmonella enterica serovars, Typhimurium, typhi and Paratyphi

AUTHOR(S): McClelland, Michael; Florea, Liliana; Sanderson,

Ken; Clifton, Sandra W.; Parkhill, Julian; Churcher, Carol; **Dougan, Gordon; Wilson, Richard K.**; Miller, Webb

CORPORATE SOURCE: Sidney Kimmel Cancer Center, San Diego, CA, 92121, USA

SOURCE: Nucleic Acids Research (2000), 28(24), 4974-4986
CODEN: NARHAD; ISSN: 0305-1048
PUBLISHER: Oxford University Press
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The Escherichia coli K-12 genome (ECO) was compared with the sampled genomes of the sibling species Salmonella enterica serovars Typhimurium, Typhi and Paratyphi A (collectively referred to as SAL) and the genome of the close outgroup Klebsiella pneumoniae (KPN). There are at least 160 locations where sequences of >400 bp are absent from ECO but present in the genomes of all three SAL and 394 locations where sequences are present in ECO but close homologs are absent in all SAL genomes. The 394 sequences in ECO that do not occur in SAL contain 1350 (30.6%) of the 4405 ECO genes. Of these, 1165 are missing from both SAL and KPN. Most of the 1165 genes are concd. within 28 regions of 10-40 kb, which consist almost exclusively of such genes. Among these regions were six that included previously identified cryptic phage. A hypothetical ancestral state of genomic regions that differ between ECO and SAL can be inferred in some cases by ref. to the genome structure in KPN and the more distant relative Yersinia pestis. However, many changes between ECO and SAL are concd. in regions where all four genera have a different structure. The rate of gene insertion and deletion is sufficiently high in these regions that the ancestral state of the ECO/SAL lineage cannot be inferred from the present data. The sequencing of other closely related genomes, such as S. bongorior Citrobacter, may help in this regard.

REFERENCE COUNT: 132 THERE ARE 132 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L42 ANSWER 7 OF 12 MEDLINE DUPLICATE 7

ACCESSION NUMBER: 2000431363 MEDLINE
DOCUMENT NUMBER: 20410723 PubMed ID: 10955756

TITLE: Interaction of Bordetella pertussis with human respiratory mucosa in vitro.

AUTHOR: Soane M C; Jackson A; Maskell D; Allen A; Keig P; Dewar A; **Dougan G; Wilson R**

CORPORATE SOURCE: Host Defence Unit, Imperial College of Science, Technology and Medicine, National Heart and Lung Institute, London, UK.

SOURCE: RESPIRATORY MEDICINE, (2000 Aug) 94 (8) 791-9.
Journal code: 8908438. ISSN: 0954-6111.
PUB. COUNTRY: ENGLAND: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200009
ENTRY DATE: Entered STN: 20000922
Last Updated on STN: 20000922
Entered Medline: 20000912

AB The human respiratory tract pathogen Bordetella pertussis is the major cause of whooping cough in infants and young children, and

also causes chronic cough in adults. B. pertussis infection damages ciliated epithelium in the respiratory tract. However, the interaction of the bacterium with the respiratory mucosa is poorly understood, and previous studies have either utilized animal tissue which may not be appropriate, or isolated cell systems which lack the complexity of the respiratory mucosa. We have studied the interaction of B. pertussis strain BP536 with human nasal turbinate tissue in an air-interface organ culture over 5 days. We have also compared infection by BP536 with two other strains, Tohama I and CN2992, to determine whether the interactions observed with BP536 are consistent, and, in both nasal turbinate and adenoid organ cultures at 24 h, to determine whether there were differences between tissue from different parts of the respiratory tract. BP536 adhered to cilia, most commonly at their base, and disorganized their spatial arrangement, they also adhered to damaged tissue and mucus, but very rarely to unciliated cells. Within the first 24 h there was a five-fold increase in bacterial density on ciliated cells, and the total number of adherent bacteria increased up to 96 h. Infection caused increased mucus at 24h and an increase in damaged epithelium from 72 h which involved both ciliated and unciliated cells. The number of residual ciliated cells did not decrease after 72 h. The three different strains of B. pertussis exhibited similar interactions with the mucosa, and there was no tissue specificity for adenoid or turbinate tissue. We conclude that B. pertussis adhered to multiple sites on the mucosa and caused hypersecretion and epithelial damage which are the pathological changes described in vivo.

L42 ANSWER 8 OF 12 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
ACCESSION NUMBER: 2000:400810 BIOSIS
DOCUMENT NUMBER: PREV200000400810
TITLE: Characterization of the complement of outer surface proteins of Group B Streptococcus.
AUTHOR(S): **Moore, J. C. (1)**; Hughes, M. J. G. (1); Santangelo, J. D. (1); **Dobson, R. J. (1)**; **Lane, J. (1)**; **Wilson, R. (1)**; Henwood, C. (1); Reason, A. J.; Redfern, J.; Stanage, E. J.; Greer, F. M.; Morris, H. R.; Feldman, R. G. (1)
CORPORATE SOURCE: (1) Microscience Ltd., London UK
SOURCE: Abstracts of the General Meeting of the American Society for Microbiology, (2000) Vol. 100, pp. 229. print.
Meeting Info.: 100th General Meeting of the American Society for Microbiology Los Angeles, California, USA May 21-25, 2000 American Society for Microbiology . ISSN: 1060-2011.
DOCUMENT TYPE: Conference
LANGUAGE: English
SUMMARY LANGUAGE: English

L42 ANSWER 9 OF 12 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
ACCESSION NUMBER: 2000:400808 BIOSIS
DOCUMENT NUMBER: PREV200000400808
TITLE: Group B Streptococcus vaccine candidates identified through signal-sequence screening.
AUTHOR(S): Hughes, M. J. G. (1); **Moore, J. C. (1)**; **Wilson, R. (1)**; **Lane, J. (1)**;

Feldman, R. G. (1); Santangelo, J. D. (1)
CORPORATE SOURCE: (1) Microscience Ltd, London UK
SOURCE: Abstracts of the General Meeting of the American Society for Microbiology, (2000) Vol. 100, pp. 228-229. print.
Meeting Info.: 100th General Meeting of the American Society for Microbiology Los Angeles, California, USA May 21-25, 2000 American Society for Microbiology . ISSN: 1060-2011.
DOCUMENT TYPE: Conference
LANGUAGE: English
SUMMARY LANGUAGE: English

L42 ANSWER 10 OF 12 WPIDS (C) 2003 THOMSON DERWENT
ACCESSION NUMBER: 1999-395182 [33] WPIDS
DOC. NO. CPI: C1999-116196
TITLE: New epithelial cell binding proteins.
DERWENT CLASS: B04 D16
INVENTOR(S): FELDMAN, R G; **SANTANGELO, J D**
PATENT ASSIGNEE(S): (MICR-N) MICROSCIENCE LTD
COUNTRY COUNT: 84
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK	LA	PG
WO 9931245	A1	19990624	(199933)*	EN	44
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG ZW					
W: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZW					
AU 9915722	A	19990705	(199948)		

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 9931245	A1	WO 1998-GB3783	19981216
AU 9915722	A	AU 1999-15722	19981216

FILING DETAILS:

PATENT NO	KIND		PATENT NO
AU 9915722	A	Based on	WO 9931245

PRIORITY APPLN. INFO: GB 1997-26586 19971216
AN 1999-395182 [33] WPIDS
AB WO 9931245 A UPAB: 19990819
NOVELTY - Several novel **Group B streptococcus** (**GBS**) gene sequences which encode proteins that may play an important role in bacterial **infections** are disclosed.
DETAILED DESCRIPTION - A protein (I) capable of binding a bacterial microorganism to epithelial cells is new, and is obtainable from a Group B streptococcal (GBS) strain.
INDEPENDENT CLAIMS are also included for:

(1) a protein (II) comprising, or having at least 60% sequence homology to, the 336 amino acid sequence given in the specification.
(2) (I) or (II) for use in a method of therapy.
(3) a polynucleotide (III) encoding (I) or (II), its complement, or a fragment.
(4) use of (I) or (II) in the manufacture of a vaccine to treat bacterial infection.
(5) use of (I), (II) or (III) for screening potential antimicrobial drugs.
(6) an antimicrobial drug selected by the method of (5).
(7) a vaccine comprising (I), (II) or (III).
(8) a vaccine comprising a microorganism having a virulence gene deletion in a gene encoding (I) or (II).
(9) an antibody raised against (I) or (II).
ACTIVITY - Immunogen.
MECHANISM OF ACTION - Vaccine
USE - The proteins of the invention may be suitable candidates for the production of therapeutically effective vaccines against bacterial **infections**, particularly **Group B streptococcus (GBS) infections**. The proteins can also be used to produce antibodies. They can also be used as a target for screening potentially useful drugs.
ADVANTAGE - Although **Group B streptococcus (GBS) infections** are treatable with antibiotics, immunization is preferable. The proteins of the invention represent potential imunogens for this purpose.
Dwg.0/0

L42 ANSWER 11 OF 12 MEDLINE DUPLICATE 8
ACCESSION NUMBER: 90262170 MEDLINE
DOCUMENT NUMBER: 90262170 PubMed ID: 2344163
TITLE: In vitro and in vivo activities of a new quinolone, WIN 57273, possessing potent activity against gram-positive bacteria.
AUTHOR: Sedlock D M; **Dobson R A**; Deuel D M; Lesher G Y; Rake J B
CORPORATE SOURCE: Department of Microbiology, Sterling Research Group, Rensselaer, New York 12144.
SOURCE: ANTIMICROBIAL AGENTS AND CHEMOTHERAPY, (1990 Apr) 34 (4) 568-75.
Journal code: 0315061. ISSN: 0066-4804.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199006
ENTRY DATE: Entered STN: 19900720
Last Updated on STN: 19900720
Entered Medline: 19900626

AB The antibacterial activity of a new 7-dimethylpyridinyl quinolone, WIN 57273, was assessed by using in vitro and in vivo models. Agar inclusion and broth dilution in vitro tests revealed broad-spectrum activity against gram-positive and selected gram-negative organisms, with the greatest potency observed against the staphylococci. The MIC for 90% of coagulase-positive strains tested (MIC90) was less than or equal to 0.002 micrograms/ml; for the coagulase-negative strains the MIC90 was 0.008 micrograms/ml. Against enterococci the MIC90 was 0.06 micrograms/ml, with comparable activity observed

against group A and **group B streptococci** as well as against the pneumococci. In general, the MIC90s for the gram-negative bacteria were less than or equal to 1 micrograms/ml. Exceptions were Serratia marcescens (MIC90, 16 micrograms/ml), Citrobacter freundii (MIC90, 4 micrograms/ml), and Pseudomonas aeruginosa (MIC90, 8 micrograms/ml). The greatest potency was observed against Haemophilus spp. and Neisseria spp., with MIC90s of 0.06 and 0.016 micrograms/ml, respectively. Broad-spectrum activity was also observed against anaerobes, with MIC90s ranging from 0.125 to 0.5 micrograms/ml among the species tested. The in vivo efficacy was determined by using a murine model by calculating the 50% protective doses against a lethal bacterial **infection** caused by strains of Staphylococcus aureus, Staphylococcus epidermidis, Streptococcus pneumoniae, Streptococcus pyogenes, Listeria monocytogenes, Escherichia coli, Klebsiella pneumoniae, and Pseudomonas aeruginosa. The staphylocci were most susceptible, with 50% protective doses for all strains ranging from 0.1 to 0.7 mg/kg. With the exception of the Pseudomonas **infection**, which was refractory to treatment, animals that were part of the other **infection** models responded to less than 10 mg/kg.(ABSTRACT TRUNCATED AT 250 WORDS)

L42 ANSWER 12 OF 12 CONFSCI COPYRIGHT 2003 CSA
ACCESSION NUMBER: 85:73490 CONFSCI
DOCUMENT NUMBER: 86008128
TITLE: Low volume sprinkler surface and subsurface distribution uniformity
AUTHOR: Goldhamer, D.A.; Kjelgren, R.; **Moore, J.M.**; **Lane, J.**
CORPORATE SOURCE: Univ. California, CA, USA
SOURCE: American Society of Agricultural Engineers, 2950 Niles Road, St. Joseph, MI 49085-9659 (USA), Paper No. T-1.
Meeting Info.: 854 0278: Third International Drip/Trickle Irrigation Congress (8540278). Fresno, CA (USA). 17-21 Nov 1985. American Society of Agricultural Engineers; Irrigation Association.
DOCUMENT TYPE: Conference
FILE SEGMENT: DCCP
LANGUAGE: UNAVAILABLE

FILE 'HOME' ENTERED AT 15:49:30 ON 25 FEB 2003